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ABSTRACT

During basic combat training, 2,072 enlisted men were classified as being either AWOL or Non-AWOL. Three hundred of these men were similarly classified after 90 days in their initial unit assignment. AWOL and Non-AWOL soldiers were then compared to determine whether certain factors could be used to predict which soldiers would go AWOL or to predict ratings of acquired military skills and of leadership potential. The results indicate that AWOL and Non-AWOL subjects differed on personality, education, intelligence, aptitude, and military component. No differences were found in attitude toward the Army, race, or physical status. AWOL and Non-AWOL subjects differed in age during initial unit assignment, but only among 17- and 18-year-old soldiers during basic combat training. Only 19-year-old and older subjects differed in career orientation. In general, the same factors that were related to AWOL were related also to military skill and leadership potential. (Author)

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The Prediction of AWOL, Military Skills, and Leadership Potential

Eugene H. Drucker and Shepard Schwartz

HUMAN RESOURCES RESEARCH ORGANIZATION
300 North Washington Street • Alexandria, Virginia 22314

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January 1973

Prepared for
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1. This report is part of the research done for Work Unit ESPRIT, Development of Methods for Improving Soldier Adjustment to the Army. A major purpose of this study was to explore the potential use of personality tests for predicting which soldiers would go AWOL. Another purpose was to study which soldiers would most successfully acquire necessary military skills, and to predict which soldiers would most likely be promoted.

2. Over 2,000 enlisted men were classified on the basis of whether they had or had not gone AWOL during basic combat training; 300 of these men were subsequently classified again on the basis of whether they had or had not gone AWOL during the first 90 days of their initial unit assignment. AWOL and non-AWOL soldiers were then compared on various factors; they differed on personality, education, intelligence, aptitude, and military component. In general, the same factors that were related to AWOL were also related to military skill and leadership potential.

3. This report will interest those concerned with motivation, attitude, leadership, delinquency, personality testing, and prediction studies.

FOR THE CHIEF OF RESEARCH AND DEVELOPMENT:

R. O. VITERNA
Colonel, GS
Chief, Behavioral
Sciences Office

HumRRO
Technical
Report
73-1

The Prediction of AWOL, Military Skills, and Leadership Potential

Eugene H. Drucker and Shepard Schwartz

HumRRO Division No. 2
Fort Knox, Kentucky

HUMAN RESOURCES RESEARCH ORGANIZATION

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The Human Resources Research Organization (HumRRO) is a nonprofit corporation established in 1969 to conduct research in the field of training and education. It is a continuation of The George Washington University Human Resources Research Office. HumRRO's general purpose is to improve human performance, particularly in organizational settings, through behavioral and social science research, development, and consultation. HumRRO's mission in work performed under contract with the Department of the Army is to conduct research in the fields of training, motivation, and leadership.

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

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FOREWORD

The research described in this report was performed by the Human Resources Research Organization as part of the Work Unit ESPRIT, Development of Methods for Improving Soldier Adjustment to the Army. The objective of the Work Unit is to develop measuring instruments for determining the sources of low motivation and attitude deterioration among enlisted men, and to adapt and evaluate methods for increasing motivation and preventing attitude deterioration. This report contains the results of a study to determine what factors can be used to predict which enlisted men will go AWOL.

The research was conducted at HumRRO Division No. 2, Fort Knox, Kentucky, where Dr. Donald F. Haggard is the Director. Personnel of the U.S. Army Armor Human Research Unit provided military support for this effort. LTC Willis G. Pratt is Chief of the Unit.

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Meredith P. Crawford
President
Human Resources Research Organization

SUMMARY AND CONCLUSIONS

PROBLEM

Recent Army statistics show an increase in the number of soldiers who go AWOL during their military service. To reduce the AWOL rate, the Army could reject recruits most likely to go AWOL or could give them special attention designed to reduce AWOL likelihood, but either solution requires that the soldiers who will go AWOL be identified in advance. Previous attempts to develop methods for predicting who will go AWOL have been unsuccessful.

To develop an effective predictive technique, the factors that cause soldiers to go AWOL must first be identified. Once identified, they can be used in a statistical formula that would combine the information from different sources to predict AWOL. The purpose of the present study is to identify the factors that cause soldiers to go AWOL. A second research project under Work Unit ESPRIT is being conducted concurrently to evaluate the effectiveness of multiple discriminant function analysis as a statistical technique for combining this information in order to make AWOL predictions.

The factors that were studied to determine their effects on AWOL are personality, attitude toward the Army, career orientation, age, years of education, intelligence, aptitude, race, Army component, and physical status.

The ability of these factors to predict Military Skills scores and Leadership Potential ratings also was assessed.

APPROACH

The subjects were 2,072 enlisted men assigned to the United States Training Center, Armor, for basic combat training. Each man completed five scales from the California Psychological Inventory (CPI) and the TA-III Questionnaire, an attitude scale measuring favorability of attitudes toward the Army. Other information for each subject was obtained from personnel records.

AWOL information was obtained for each subject during basic combat training from unit morning reports. After 90 days of initial duty assignment, the information was obtained by inserting suspense actions in Military Personnel Record Jackets; the officers or NCOs who normally prepare and review evaluation ratings were asked to use a special form to report whether a subject was AWOL, and to rate each subject on military skills and leadership potential.

Subjects were classified as being either AWOL or Non-AWOL during basic combat training and again during initial duty assignment. AWOL and Non-AWOL subjects were compared to determine the relationship between each factor and the tendency to go AWOL. Separate analyses were performed for 17- and 18-year-old soldiers and for soldiers 19 years of age and older during basic combat training.

RESULTS

During both basic combat training and initial duty assignment, AWOL and Non-AWOL subjects were found to differ in their scores on the five personality scales. At both times, the Non-AWOL subjects had the more socially desirable personality traits.

AWOL and Non-AWOL subjects did not differ in their attitudes toward the Army, either during basic combat training or during initial duty assignment. No differences were found between the two groups in career orientation except for soldiers 19 years of age and older; during basic combat training, those who planned to make the Army their career had a greater tendency to go AWOL.

Among 17- and 18-year-old soldiers in basic combat training, those who were AWOL were found to be younger than those who were not AWOL. During initial duty assignment, AWOL soldiers were also younger than Non-AWOL soldiers.

During both basic combat training and initial duty assignment, AWOL soldiers were found to have less education, lower intelligence, lower mechanical aptitude, and lower clerical aptitude than Non-AWOL soldiers.

Neither race nor physical status was found to be related to AWOL. However, RA personnel had a greater tendency to go AWOL than US personnel.

Education, aptitude, intelligence, age, and the Responsibility scale from the CPI were found to correlate highest among the factors with Military Skills ratings. Race, component, and the four remaining personality scales showed a small correlation with these ratings, while attitude toward the Army, career orientation, and physical status were unrelated to military skills.

Subjects with the greatest leadership potential were found to have more socially desirable personality traits than those with low ratings. Those with high ratings were also found to be older, better educated, and more intelligent, and to have higher aptitude scores.

CONCLUSIONS

(1) The results of this study suggest that personality is an important determinant of AWOL. Thus, future techniques designed to predict which soldiers will go AWOL should take personality traits into account.

(2) Attitude toward the Army is not an important factor in determining which soldiers will go AWOL.

(3) Soldiers planning to make the Army their career appear more likely to go AWOL. Among 19-year-old and older soldiers, more of those who were oriented toward an Army career were AWOL than those not oriented toward an Army career; also, RA personnel were more likely to go AWOL than US personnel. Thus, an increase in the AWOL rate may occur as a result of having a volunteer Army.

(4) Soldiers who enter the Army at their 17th birthday are much more likely to go AWOL during basic combat training than soldiers who enter at other ages. During initial unit assignment, younger soldiers generally are more apt to go AWOL than older soldiers.

(5) Soldiers who go AWOL have less education, lower intelligence, and less mechanical and clerical aptitude than soldiers who do not go AWOL.

(6) Race is not an important factor in determining who will go AWOL.

(7) The same factors appear to cause both younger and older soldiers to go AWOL.

(8) The same factors that cause soldiers to go AWOL also influence acquisition of military skills and leadership potential.

CONTENTS

	Page
Introduction	3
Method	5
Approach	5
Subjects	6
Materials	7
California Psychological Inventory	7
TA-III Questionnaire	8
Career Orientation	8
Background Characteristics	8
Military Skills Scale	9
Leadership Potential Scale	9
Results	9
Prediction of AWOL During Basic Combat Training	9
Personality	9
Attitude Toward Army	10
Career Orientation	10
Background Characteristics	10
Prediction of AWOL Among Soldiers 17 and 18 Years of Age During Basic Combat Training	11
Personality	11
Attitude Toward Army	12
Career Orientation	12
Background Characteristics	13
Prediction of AWOL Among Soldiers 19 Years of Age or Older During Basic Combat Training	14
Personality	14
Attitude Toward Army	14
Career Orientation	14
Background Characteristics	15
Prediction of AWOL During Initial Unit Assignment	16
Personality	16
Attitude Toward Army	16
Career Orientation	17
Background Characteristics	17
Prediction of Military Skills Ratings	18
Prediction of Leadership Potential Ratings	19
Personality	19
Attitude Toward Army	20
Career Orientation	20
Background Characteristics	21

Page

Discussion 23

Literature Cited 31

Appendices

A AWOL Information Form 33
B TA-III Questionnaire 34
C Military Skills Scale 38
D Leadership Potential Rating Scale 39

Tables

1 Mean California Psychological Inventory Scores for AWOL and Non-AWOL Subjects During Basic Combat Training 10
2 Comparison Between AWOL and Non-AWOL Subjects by Career Orientation Score During Basic Combat Training 10
3 Mean Background Characteristics of AWOL and Non-AWOL Subjects During Basic Combat Training 11
4 Comparison Between AWOL and Non-AWOL Subjects on Background Characteristics During Basic Combat Training 11
5 Mean California Psychological Inventory Scores for 17- and 18-Year-Old AWOL and Non-AWOL Subjects During Basic Combat Training 12
6 Comparison Between 17- and 18-Year-Old AWOL and Non-AWOL Subjects by Career Orientation Score During Basic Combat Training 12
7 Mean Background Characteristics of 17- and 18-Year-Old AWOL and Non-AWOL Subjects During Basic Combat Training 13
8 Comparison Between 17- and 18-Year-Old AWOL and Non-AWOL Subjects on Background Characteristics During Basic Combat Training 13
9 Mean California Psychological Inventory Scores for 19-Year-Old and Older AWOL and Non-AWOL Subjects During Basic Combat Training 14
10 Comparison Between 19-Year-Old and Older AWOL and Non-AWOL Subjects by Career Orientation Score During Basic Combat Training 15
11 Mean Background Characteristics of 19-Year-Old and Older AWOL and Non-AWOL Subjects During Basic Combat Training 15
12 Comparison Between 19-Year-Old and Older AWOL and Non-AWOL Subjects on Background Characteristics During Basic Combat Training 16
13 Mean California Psychological Inventory Scores for AWOL and Non-AWOL Subjects During Initial Unit Assignment 16
14 Comparison Between AWOL and Non-AWOL Subjects by Career Orientation Score During Initial Unit Assignment 17
15 Mean Background Characteristic Scores of AWOL and Non-AWOL Subjects During Initial Unit Assignment 17
16 Comparison Between AWOL and Non-AWOL Subjects on Background Characteristics During Initial Unit Assignment 18
17 Correlation Coefficients Between Information Measures and Military Skills Ratings 19

Tables (Cont.)

		Page
18	Mean California Psychological Inventory Scores for Subjects by Leadership Potential Group	20
19	Comparison Between Leadership Potential Groups by Career Potential Score	21
20	Mean Background Characteristic Scores for Subjects by Leadership Potential Group	21
21	Comparison Between Leadership Potential Groups by Background Characteristics	22

The Prediction of AWOL, Military Skills, and Leadership Potential

INTRODUCTION

According to recent Army statistics, there has been a substantial increase in the AWOL rate over the last few years (1). In 1967, 78 out of every 1,000 soldiers went AWOL. The rate has increased during each subsequent year. By 1971, the rate had more than doubled; 177 out of every 1,000 soldiers went AWOL during 1971.

High AWOL rates can have negative consequences for the Army in terms of both lost manpower and reduced morale. Not only are personnel who are absent from duty unable to perform the tasks or duties to which they are assigned, but their absence often interferes with the performance of those tasks to which their replacements had initially been assigned. In addition, manpower is lost when personnel are needed to process AWOL reports, to prosecute soldiers who have been AWOL, and to administer whatever punitive measures are assigned. A high AWOL rate is also likely to have a detrimental effect on the morale of other soldiers, further reducing the performance efficiency of soldiers who have not gone AWOL.

One possible solution to the AWOL problem would be the rejection of recruits who would be most likely to go AWOL during their military service. Assuming that the manpower source is large enough to supply the required number of soldiers, those most likely to go AWOL need not be accepted into the Army. Another possible solution would require that the soldiers most likely to go AWOL be given special treatment by the Army to reduce the likelihood that they would, in fact, go AWOL. For example, special counselors could be assigned to these people to help them with personal problems or in adjusting to the demands of Army life.

While either approach could theoretically solve the Army's AWOL problem, they both require a means for identifying AWOL soldiers in advance. Unfortunately, previous attempts to develop techniques for predicting which soldiers would go AWOL have been relatively unsuccessful. For example, the Army Behavioral Science Research Laboratory (BESRL) conducted a study (2) in which three delinquency scales from the Personal Opinion Study and a scale developed from BESRL's Personal History Form, the Overall Acceptability Scale, were administered to a sample of basic trainees. The scales were examined for their ability to predict delinquency by comparing the responses made by nondelinquents to those made by soldiers who had later violated military law. The results showed that the scales could not efficiently differentiate between the men in these two groups. Consequently, it was concluded that none of these instruments would be useful for predicting which soldiers would commit disciplinary offenses.

Earlier, the U.S. Naval Retraining Command (3, 4, 5, 6, 7) evaluated an instrument developed from personality tests, the Delinquency Potential (DP) scale. This scale was formulated from items selected from the Minnesota Multiphasic Personality Inventory (MMPI) and the California Psychological Inventory (CPI). To develop the DP Scale, 474 items from the two personality tests were administered to 20,000 men. The 119 items to which delinquents and nondelinquents responded most differently were selected to be included in the scale. In the study by Gunderson, Ballard, and Huge (6), it was found that 51% of all delinquents could be identified, but 25% of the nondelinquents would have been incorrectly identified as delinquents. Thus, although the DP Scale did differentiate between delinquents and nondelinquents, it did not differentiate well enough to be useful for prediction purposes. Because there were many more subjects in the nondelinquent sample than in the delinquent sample, the number of nondelinquents who

would have been misclassified through use of the scale would have been far greater than the number of delinquents who would have been correctly classified.

In another study of delinquency, Datel (8) administered the Socialization scale of the CPI to 762 inductees and 303 stockade prisoners at Fort Ord. It was found that inductees and stockade prisoners tended to differ in their responses. One-third of the stockade prisoners could have been correctly identified by the scale, but 1% of the inductees would have been incorrectly identified as prisoners. Because the number of recruits in the Army is far greater than the number of stockade prisoners, misclassification of 1% of the inductees would have caused a very large number of nondelinquents to be misclassified as probable delinquents.

Thus, previous attempts to develop a scale for predicting which soldiers would commit delinquent acts have been unsuccessful. While many successful predictions of delinquency can be made using these scales, they can be made only at a high cost since, for each delinquent correctly identified, an even greater number of nondelinquents would be incorrectly identified. If soldiers were obtained from an unlimited source of manpower, erroneous classification might be tolerated. However, when soldiers must be obtained from a limited manpower source, erroneous classification leads to the loss of too many successful soldiers to be practical. With the probable termination of the draft, it can be assumed that the manpower source will be quite limited in the future. If potential delinquents are to be prohibited from military service, it first will be necessary to develop better techniques for predicting delinquency.

One problem in developing an instrument to predict who will go AWOL is the fact that there are many underlying factors that cause soldiers to go AWOL. Any attempt to predict which soldiers will go AWOL by using a measure of only one factor would, therefore, almost certainly fail. A two-step approach is thus needed to develop an instrument capable of predicting AWOL. The first step would be to identify factors that cause soldiers to go AWOL, and the second would be to combine these factors into a single predictive instrument that would allow a statistical technique to be used for making the predictions. The statistical technique would have to take into account all the information provided by these factors.

Many of the factors that cause military personnel to go AWOL have already been identified. A study by the U.S. Navy Neuropsychiatric Unit (9), found that factors that predicted adjustment to the marines included years of education, history of school repulsion, and age at enlistment. Among those factors found by Stouffer and Otness (10) to discriminate between delinquents and nondelinquents in the Navy were type of home life, number of health complaints, and history of civilian delinquency. In an earlier study of military delinquency by HumRRO (11), such factors as socioeconomic status, home background, pre-Army delinquency, and aggressiveness were found to be important.

One purpose of the present study is to attempt to identify additional factors that may be related to AWOL in the Army and to verify the importance of factors previously identified in other research. Simultaneously, an attempt is being made under Work Unit ESPRIT to assess the adequacy of multiple discriminant function analysis as a technique to combine known factors in a predictive formula.

In predicting which soldiers go AWOL, it is possible that the causes of AWOL *during* basic combat training are different from the causes *following* basic combat training. During basic training, soldiers have less unsupervised time than they will have later in their military careers. Therefore, it is likely that a soldier who goes AWOL during basic training will have to be more deliberate in his plans to go AWOL than soldiers in other phases of their military service. Once a soldier is permanently assigned to a regular unit, he has considerable time without supervision and spends a great deal of time off post. It is easier for a soldier in this situation to go AWOL than one who is still in basic training. Consequently, the factors that cause a soldier to go AWOL during basic training are likely

to be somewhat different than the factors following training. One purpose of the present study is to determine whether the factors that differentiate between AWOL and non-AWOL soldiers during basic training differ from those that differentiate between AWOL and Non-AWOL soldiers during regular duty assignments.

Another major purpose of this study is to explore the potential use of personality tests for predicting which soldiers will go AWOL. It is probable that some aspect of a soldier's personality may increase the likelihood that he will go AWOL. For example, some soldiers may go AWOL as a reaction to stress; because of an inability to tolerate stress, they may try to escape what is to them a stress-producing situation. On the other hand, some soldiers may have a high tolerance for stress and may not go AWOL even if they find the Army to be stressful. To the extent that personality tests can measure such factors as tolerance for stress, it would be possible to use them as sources of information for predicting which soldiers will go AWOL.

Previous studies have already found that delinquents and nondelinquents respond differently, on the average, to scales from the California Psychological Inventory. Studies by Gough and Peterson (12) and by Peterson, Quay, and Anderson (13) have shown that the CPI can discriminate between delinquents and nondelinquents. The Socialization scale of the CPI has been found especially successful in making such discriminations. For example, in the previously mentioned study by Datel (8), the Socialization scale was found to discriminate between stockade prisoners and inductees who were not confined to the stockade.

Attitude toward the Army is another factor that will be explored as a possible factor causing soldiers to go AWOL—soldiers who have unfavorable attitudes toward the Army may be more likely to go AWOL than soldiers who have favorable attitudes. The influence of career orientation will also be examined—it is expected that soldiers who plan to make the Army their career will be less likely to go AWOL than soldiers who do not plan to make the Army their career. Other factors to be studied are intelligence, personal aptitude, age, race, amount of education, military component, and physical status.

It is also a purpose of the present study to explore the possibility that these same sources of information can be used to predict which soldiers would most successfully acquire necessary military skills, and to predict which soldiers are most likely to be promoted into positions of leadership. Going AWOL, failing to learn required skills, and failing to achieve a position of leadership all are signs of maladjustment to military life. It is likely, therefore, that all share the same underlying causes, and that all can be predicted by a knowledge of these causes.

METHOD

APPROACH

To determine whether factors can be used to predict which soldiers would go AWOL during their military careers, information on each factor for each subject was obtained prior to basic combat training. AWOL reports received during basic combat training and during initial unit assignments allowed each subject to be classified later as being AWOL or non-AWOL. The information describing AWOL soldiers was then compared to the information describing non-AWOL soldiers.

AWOL information during basic combat training was obtained from unit morning reports; all men who were listed one or more times on morning reports as being AWOL were classified as AWOL subjects. AWOL information during initial unit assignments was obtained by inserting a suspense action in the Military Personnel Record Jacket for each

subject. Each subject's commander was asked to provide AWOL information on an enclosed form 90 days after the subject was assigned to the Unit and return the form to the Chief of the Armor Human Research Unit. (Appendix A contains the AWOL information form.) The following information was requested:

(1) The organization to which the soldier was currently assigned.
(2) The date on which the assignment was made.
(3) Current pay grade.
(4) Current MOS.
(5) Current duty position title.
(6) Whether or not the soldier had his period of active duty extended by reason of AWOL or other misconduct.
(7) The date, length, and cause of each extension.

In addition, the commander was asked to provide ratings of the degree to which the subject had acquired a number of different military skills and to rate the subject's leadership potential. These ratings were to be made by the officers or NCOs who normally prepare and review evaluations of their men.

To determine how well each factor could predict which soldiers would go AWOL during basic combat training, the subjects were classified as being either AWOL or Non-AWOL during basic training. The information pertaining to subjects who went AWOL during basic combat training was then compared to the information pertaining to subjects who did not go AWOL in order to discover whether there were differences between the two groups on any of the factors.

To determine how the relationship between these factors and AWOL was affected by the age of the subjects, three analyses were conducted on the data received during basic combat training. The first analysis included data from all subjects regardless of their age, the second included data only from 17- and 18-year-old subjects, while the third included data only from subjects 19 years of age and older.

Data received during initial duty assignments were analyzed only once, using the entire sample for which AWOL data were available. The sample of AWOL subjects during initial unit assignment was too small to allow it to be further divided into different age groups.

The rating received by the subjects during initial duty assignments was correlated with the values for each of the different factors to determine how well the different factors could predict *acquisition* of military skills.

Subjects were divided into four groups on the basis of their ratings to determine how well the different factors could predict *ratings* of leadership potential. Information pertaining to subjects in the four groups was then compared to determine whether or not there were significant differences among the four groups on any of these factors.

Information pertaining to personality, attitude toward the Army, and career orientation was obtained by administering tests and questionnaires to subjects before the start of basic combat training. Information on other factors was obtained from personnel records.

SUBJECTS

The subjects for the study were 2,072 enlisted men assigned to basic training companies at the United States Training Center, Armor.

During basic combat training, 60 of these men were reported by their units as having been AWOL; the remaining 2,012 men were not reported as having been AWOL. The 60 AWOL subjects included 24 men who were 17 or 18 years of age, and 36 men who were 19 years old or older. The 2,012 Non-AWOL subjects included 537 men who were 17 or 18 years of age, and 1,462 men who were 19 years of age or older (the

remaining 13 Non-AWOL subjects could not be classified by age because of missing or inaccurate data).

AWOL reports during initial unit assignments were received for only 338 of the original sample of over 2,000 soldiers. Of this number, 31 were reported as having been AWOL during initial unit assignment, and 269 were reported as not having been AWOL. The remaining 38 reports were incorrectly completed and could not be used for the analysis. AWOL reports were not received at all for the remaining 1,734 subjects.

MATERIALS

California Psychological Inventory[1]

Because the California Psychological Inventory (CPI) had been found in previous studies (8, 12, 13) to differentiate between delinquents and nondelinquents, the test was chosen to be included in the present study. The CPI appeared to be particularly appropriate since it was initially developed for use with normal rather than abnormal persons.

The CPI contains a total of 480 items that together yield 18 scores representing different aspects of social interaction. Since there was not sufficient time to administer the entire inventory to the subjects, only five of the 18 scales were included.

To select the five scales, a group of experienced officers and noncommissioned officers were given a description of each of the 18 traits measured by the inventory. They were asked to select the five traits they considered the most important for noncommissioned officers to possess. The five subscales, and their descriptions as provided in the CPI test manual (14) are listed:

(1) Dominance. Persons scoring high on the Dominance subscale were described as "aggressive, confident, persistent, and planful; as being persuasive and verbally fluent; as self-reliant and independent; and as having leadership potential and initiative."

(2) Responsibility. Persons scoring high on the Responsibility subscale were described as being "planful, responsible, thorough, progressive, capable, dignified, and independent; as being conscientious and dependable; resourceful and efficient; and as being alert to ethical and moral issues."

(3) Socialization. Persons scoring high on the Socialization scale were described as "serious, honest, industrious, modest, obliging, sincere, and steady; as being conscientious and responsible; and as being self-denying and conforming."

(4) Communality. Persons scoring high on the Communality scale were described as "dependable, moderate, tactful, reliable, sincere, patient, steady and realistic; as being honest and conscientious; and as having common sense and good judgment."

(5) Achievement via Independence. Persons scoring high on the Achievement via Independence scale were described as "mature, forceful, strong, dominant, demanding, and foresighted; as being independent and self-reliant; and as having superior intellectual ability and judgment."

The final version containing these five scales consisted of 185 items. Each item was a statement with which the respondent indicated agreement or disagreement.

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Since there is evidence to indicate that item responses obtained to selected items isolated from the context of a personality inventory may not be comparable to those obtained within the context, the results of this research should not be considered applicable to the standardized complete form of the inventory.

TA-III Questionnaire

The TA-III is an attitude questionnaire developed by HumRRO Division No. 3 for Work Unit TRANSITION. The first section consisted of a list of 14 concepts, such as the U.S. Army, Labor Unions, and Going to School. The subject was required to rate the favorability of his feelings toward each of these concepts. Six concepts concerned the military, and one point was given for each of these six concepts that was described favorably.

The second section of the questionnaire consisted of 16 statements concerning the Army, such as "The Army makes a man of you" and "Most Army officers are well qualified for their jobs." The subject responded to each statement by stating the degree to which he agreed or disagreed with it. One point was given for each statement with which he agreed when that item was favorable toward the Army. One point was also given for each statement with which a subject disagreed when the item was unfavorable toward the Army.

The third section consisted of three questions referring to adjustment to Army life and to reenlistment intentions. These items were not scored.

The range of possible scores on the questionnaire was from 0 to 22, with high scores indicating favorable attitudes toward the Army. The TA-III Questionnaire is given in Appendix B.

Career Orientation

A measure of orientation toward an Army career was obtained from the last two questions in Section 3 of the TA-III. These questions were concerned with the subject's chances of reenlisting after his present tour of duty. Subjects who indicated on both questions that they will almost certainly reenlist or will probably reenlist were given two points. Subjects who indicated on one of the two questions that they would reenlist were given one point. Subjects who did not indicate on either question that they would reenlist were given 0 points. Thus, the higher the number of points received, the more a subject was oriented toward the Army as a career.

Background Characteristics

The following information was obtained from military records:

(1) Race. Subjects were classified as either Black (Negro) or White (Caucasian). There were too few subjects of other races to be included in the data analysis.
(2) Age.
(3) Education. Information was obtained concerning the number of years each subject went to school.
(4) Intelligence. The General Technical (GT) score served as a measure of intelligence.
(5) Aptitude. The Mechanical Aptitude (MA) and Clerical Aptitude (*Cl*) scores served as measures of personal aptitude.
(6) Component. Subjects were classified as either RA or US.
(7) Physical Status. Subjects with no ratings of "2" on their Physical Status records were assigned a score of 0. Those with a single rating of "2" were assigned a score of 1. Those with more than one rating of "2" were assigned a score of 2. Thus, the higher the score, the lower the physical status of the subject.

Military Skills Scale

A rating scale was devised to measure subjectively the capacity of each subject to perform different skills judged to be important for success as an enlisted man. The eight skills were adapted from the Army's Enlisted Efficiency Report:

(1) Knowledge of job.
(2) Performance of job.
(3) Adaptability on job.
(4) General responsibility.
(5) Personal relations skills.
(6) Leadership skills.
(7) Acceptance of authority.
(8) Achievement drive.

For each of these eight skills, a scale was provided on which it could be indicated whether the subject was outstanding, above average, about average, low average, or unsatisfactory. These ratings were to be made by the officers or NCOs who would normally prepare and review such evaluations. (The Military Skills scale is contained in Appendix C.)

To score the scale, values from 1 to 5 were given to each response. A subject was given five points for each outstanding rating; four points for each above average rating; three points for each about average rating; two points for each low average rating; and one point for each unsatisfactory rating. These points were then summed for all eight skills, to yield the Military Skills score. The range of possible scores was from 8 to 40 points.

Leadership Potential Scale

To measure leadership potential, a scale was provided on which the rater could indicate the highest grade at which he thought the man could function effectively. These ratings were to be made by the same persons who made the Military Skills ratings. The respondent was asked to rate the subject as capable of functioning as an officer, or to select the grade of enlisted man, ranging from E1 to E9, at which the subject could function effectively. Occasionally, respondents checked the officer category and also specified an enlisted man's grade. Whenever this occurred, it was assumed that the soldier could have performed at both levels, and was listed in the higher ranking category. (The Leadership Potential scale is contained in Appendix D.)

Subjects were placed into one of four groups based upon their ratings: a rating from E1 to E3, Group I; a rating from E4 to E6, Group II; a rating from E7 to E9, Group III; a rating of officer or warrant officer, Group IV.

RESULTS

PREDICTION OF AWOL DURING BASIC COMBAT TRAINING

Personality

The mean scores for AWOL and Non-AWOL subjects on the five CPI scales are contained in Table 1. The mean score for AWOL subjects was less than that received by Non-AWOL subjects for each of the scales. To determine whether these differences were statistically significant, a *t*-test was conducted between the two means for each trait. The results of the tests showed that all of the differences were statistically significant.

Table 1

Mean California Psychological Inventory Scores for AWOL and Non-AWOL Subjects During Basic Combat Training

Personality Trait	AWOL Subjects (N=60)	Non-AWOL Subjects (N=2012)	*t*	Significance Level
Dominance	20.0	22.7	2.89	.01
Responsibility	19.8	24.4	6.80	.01
Socialization	26.9	32.0	5.42	.01
Communality	21.5	23.1	1.96	.05
Achievement via Independence	12.0	14.8	5.88	.05

Attitude Toward Army

The mean TA-III scores for the two groups show that there was little difference in their attitudes toward the Army. Although the mean for the Non-AWOL subjects (14.8) was slightly more favorable than the mean for the AWOL subjects (14.3), a *t*-test showed that this difference was not statistically significant.

Career Orientation

The number of AWOL and Non-AWOL subjects having each Career Orientation score is shown in Table 2. A chi-square test showed that AWOL and Non-AWOL subjects did not differ significantly in their career orientation.

Table 2

Comparison Between AWOL and Non-AWOL Subjects by Career Orientation Score During Basic Combat Training

Career Orientation Score	Number of AWOL Subjects	Number of Non-AWOL Subjects
0	32	1,270
1	12	231
2	16	478

χ^2=4.61 (*df*=2); NS

Background Characteristics

The mean age, education level, intelligence, and aptitude scores for AWOL and Non-AWOL subjects are contained in Table 3. AWOL subjects were slightly younger than Non-AWOL subjects, although a *t*-test showed that the difference was not statistically significant. AWOL subjects had had almost two fewer years of education than Non-AWOLs, and received lower mean General Technical, Mechanical Aptitude, and Clerical

Aptitude scores. The differences in education level, intelligence, and aptitude were statistically significant ($p<.01$).

Table 3

Mean Background Characteristics of AWOL and Non-AWOL Subjects During Basic Combat Training

Background Characteristic	AWOL Subjects (N=60)	Non-AWOL Subjects (N=1999)	*t*	Significance Level
Age (years)	19.4	19.7	0.72	NS
Education (years)	10.0	11.9	9.61	.01
General Technical Score	93.5	104.8	5.92	.01
Mechanical Aptitude Score	98.3	104.6	2.84	.01
Clerical Aptitude Score	97.2	105.4	4.71	.01

The number of AWOL and Non-AWOL subjects are listed in Table 4 according to race, military component, and physical status. A chi-square test showed that the proportion of RA and US personnel differed significantly among the two groups. In the AWOL sample, 70% of the subjects were RA personnel, while only 53% of the Non-AWOL sample were RA personnel. AWOL and Non-AWOL subjects did not differ significantly in either racial composition or physical status.

Table 4

Comparison Between AWOL and Non-AWOL Subjects on Background Characteristics During Basic Combat Training

Background Characteristic	Number of AWOL Subjects	Number of Non-AWOL Subjects	χ^2	*df*	Significance Level
Race					
White	52	1,828	1.44	1	NS
Black	8	162			
Component					
RA	42	1,066	5.96	1	.05
US	18	938			
Physical Status					
0	36	1,286			
1	22	635	0.61	2	NS
2	2	70			

PREDICTION OF AWOL AMONG SOLDIERS 17 AND 18 YEARS OF AGE DURING BASIC COMBAT TRAINING

Personality

The mean scores for 17- and 18-year-old AWOL and Non-AWOL subjects on the five CPI scales are contained in Table 5. Significant differences between the means for the two groups were found on the Responsibility, Socialization, and Achievement via

Independence scales. For each of these traits, the mean score obtained by the AWOL subjects was lower than the score obtained by the Non-AWOL subjects. The differences between the means for the two groups on the Dominance and Communality scales were not statistically significant.

Table 5

Mean California Psychological Inventory Scores for 17- and 18-Year-Old AWOL and Non-AWOL Subjects During Basic Combat Training

Personality Trait	AWOL Subjects (N=24)	Non-AWOL Subjects (N=532)	*t*	Significance Level
Dominance	21.7	21.7	0.00	NS
Responsibility	18.5	22.0	3.33	.01
Socialization	25.2	28.4	2.82	.01
Communality	20.0	21.4	1.40	NS
Achievement via Independence	11.6	13.5	2.24	.05

Attitude Toward Army

Among 17- and 18-year-old subjects, those in the AWOL group showed a slightly less favorable attitude toward the Army (mean = 13.8) than those in the Non-AWOL group (mean = 15.6). However, a *t*-test showed that the difference between the means was not statistically significant.

Career Orientation

The number of 17- and 18-year-old subjects in the AWOL and Non-AWOL groups having each Career Orientation score is listed in Table 6. The subjects in the two groups did not differ significantly in their career orientation.

Table 6

Comparison Between 17- and 18-Year-Old AWOL and Non-AWOL Subjects By Career Orientation Score During Basic Combat Training

Career Orientation Score	Number of AWOL Subjects	Number of Non-AWOL Subjects
0	15	256
1	4	61
2	5	207

χ^2=3.42 (*df*=2); NS

Background Characteristics

The mean age, education level, intelligence, and aptitude scores for 17- and 18-year-old AWOL and Non-AWOL subjects are contained in Table 7. Statistically significant differences were found between the means for the two groups on all characteristics except Mechanical Aptitude. The subjects in the AWOL group were found to be younger than those in the non-AWOL group ($p<.01$) and they had 0.8 year less education ($p<.05$). Those in the AWOL group also were found to have lower mean General Technical ($p<.01$) and Clerical Aptitude scores ($p<.05$).

Table 7

Mean Background Characteristics of 17- and 18-Year-Old AWOL and Non-AWOL Subjects During Basic Combat Training

Background Characteristic	AWOL Subjects (N=24)	Non-AWOL Subjects (N=537)	*t*	Significance Level
Age (years)	17.3	17.5	3.14	.01
Education (years)	9.7	10.5	2.47	.05
General Technical Score	90.4	97.1	2.63	.01
Mechanical Aptitude Score	98.8	99.4	0.21	NS
Clerical Aptitude Score	95.7	101.2	2.22	.05

The number of 17- and 18-year-old AWOL and Non-AWOL subjects is listed in Table 8 according to race, component, and physical status. The two groups did not differ significantly on any of these background characteristics.

Table 8

Comparison Between 17- and 18-Year-Old AWOL and Non-AWOL Subjects on Background Characteristics During Basic Combat Training

Background Characteristic	Number of AWOL Subjects	Number of Non-AWOL Subjects	χ^2	*df*	Significance Level
Race					
White	22	497	0.04	1	NS
Black	2	39			
Component					
RA	24	473	2.16	1	NS
US	0	64			
Physical Status					
0	14	360	3.33	2	NS
1	8	161			
2	2	13			

PREDICTION OF AWOL AMONG SOLDIERS 19 YEARS OF AGE AND OLDER DURING BASIC COMBAT TRAINING

Personality

The mean scores for 19-year-old and older AWOL and Non-AWOL subjects on the five CPI scales are contained in Table 9. Significant differences ($p<.01$) between the means for the two groups were found on the Dominance, Responsibility, Socialization, and Achievement via Independence scales. For each of these traits, the mean score for the AWOL subjects was less than the mean score for the Non-AWOL subjects. While the mean score for AWOL subjects was also lower than the mean score for non-AWOL subjects on the Communality scale, the difference between the two groups was not statistically significant.

Table 9

Mean California Psychological Inventory Scores for 19-Year-Old and Older AWOL and Non-AWOL Subjects During Basic Combat Training

Personality Trait	AWOL Subjects (N=36)	Non-AWOL Subjects (N=1457)	t	Significance Level
Dominance	18.8	23.1	3.44	.01
Responsibility	20.6	25.3	5.31	.01
Socialization	28.0	33.4	3.94	.01
Communality	22.5	23.7	1.06	NS
Achievement via Independence	12.2	15.2	5.26	.01

Attitude Toward Army

Among the subjects who were 19 years of age and older, a significant difference on the TA-III Scale was not found between those in the AWOL group (mean = 14.7) and those in the Non-AWOL group (mean = 14.4).

Career Orientation

The number of 19-year-old and older subjects in the AWOL and Non-AWOL groups having each Career Orientation score is contained in Table 10. The subjects in the two groups were found to differ significantly ($p<.05$) in their career orientation. While 17 out of 36 subjects (47%) in the AWOL group obtained a Career Orientation score of zero, 1,002 out of 1,432 subjects (70%) in the Non-AWOL group obtained this score. Similarly, while 11 out of 36 subjects (31%) in the AWOL group obtained a maximum score of 2 on the Career Orientation scale, only 266 out of 1,432 subjects (19%) in the Non-AWOL group obtained this score.

Table 10

Comparison Between 19-Year-Old and Older AWOL and Non-AWOL Subjects by Career Orientation Score During Basic Combat Training

Career Orientation Score	Number of AWOL Subjects	Number of Non-AWOL Subjects
0	17	1,002
1	8	164
2	11	266

χ^2=8.77 (df=2); $p<.05$

Background Characteristics

The mean age, education level, intelligence, and aptitude scores for 19-year-old and older subjects in the AWOL and Non-AWOL groups are contained in Table 11. Statistically significant differences ($p<.01$) were found between the two groups on all background characteristics except age. Compared to subjects in the Non-AWOL group, those in the AWOL group were found to have more than two years less education as well as lower General Technical, Mechanical Aptitude, and Clerical Aptitude scores.

Table 11

Mean Background Characteristics of 19-Year-Old and Older AWOL and Non-AWOL Subjects During Basic Combat Training

Background Characteristic	AWOL Subjects (N=36)	Non-AWOL Subjects (N=1462)	t	Significance Level
Age (years)	20.9	20.5	0.63	NS
Education (years)	10.2	12.5	8.69	.01
General Technical Score	95.5	107.7	4.53	.01
Mechanical Aptitude Score	97.9	106.5	2.81	.01
Clerical Aptitude Score	98.3	106.9	3.66	.01

The number of 19-year-old and older AWOL and Non-AWOL subjects are listed in Table 12 according to race, component, and physical status. The two groups did not differ significantly on any of these three background characteristics.

Table 12

Comparison Between 19-Year-Old and Older AWOL and Non-AWOL Subjects on Background Characteristics During Basic Combat Training

Background Characteristic	Number of AWOL Subjects	Number of Non-AWOL Subjects	χ^2	*df*	Significance Level
Race					
White	30	1,331	2.04	1	NS
Black	6	123			
Component					
RA	18	588	1.01	1	NS
US	18	873			
Physical Status					
0	22	926			
1	14	474	1.87	2	NS
2	0	57			

PREDICTION OF AWOL DURING INITIAL UNIT ASSIGNMENT

Personality

The mean scores for AWOL and Non-AWOL subjects on the five CPI scales are contained in Table 13. The mean scores for AWOL subjects were lower than the mean scores for Non-AWOL subjects on all five scales. Each of these differences was found to be statistically significant.

Table 13

Mean California Psychological Inventory Scores for AWOL and Non-AWOL Subjects During Initial Unit Assignment

Personality Trait	AWOL Subjects (N=32)	Non-AWOL Subjects (N=269)	*t*	Significance Level
Dominance	19.0	23.5	4.62	.01
Responsibility	20.6	25.5	5.54	.01
Socialization	28.6	33.0	3.73	.01
Communality	21.4	24.2	2.51	.05
Achievement via Independence	12.8	15.4	3.31	.01

Attitude Toward Army

The mean TA-III scores for the two groups show that the AWOL subjects had slightly more favorable attitudes toward the Army (mean = 16.3) than the Non-AWOL subjects (mean = 14.9). The difference between the two means, however, was not statistically significant.

Career Orientation

The number of AWOL and Non-AWOL subjects having each Career Orientation score is contained in Table 14. A chi-square test showed that there were no differences between the two groups in their career orientation.

Table 14

Comparison Between AWOL and Non-AWOL Subjects by Career Orientation Score During Initial Unit Assignment

Career Orientation Score	Number of AWOL Subjects	Number of Non-AWOL Subjects
0	16	187
1	4	21
2	11	58

χ^2=4.48 (*df*=2); NS

Background Characteristics

The mean age, education level, intelligence, and aptitude scores for AWOL and Non-AWOL subjects are contained in Table 15. AWOL subjects were found to be significantly younger than Non-AWOL subjects ($p<.01$) and to have significantly fewer years of education ($p<.01$). The General Technical, Mechanical Aptitude, and Clerical Aptitude scores for AWOL subjects were also found to be significantly lower than those for Non-AWOL subjects ($p<.01$).

Table 15

Mean Background Characteristic Scores of AWOL and Non-AWOL Subjects During Initial Unit Assignment

Background Characteristic	AWOL Subjects (N=31)	Non-AWOL Subjects (N=267)	*t*	Significance Level
Age (years)	18.2	20.1	6.77	.01
Education (years)	9.9	12.5	8.23	.01
General Technical Score	90.4	109.3	7.84	.01
Mechanical Aptitude Score	98.0	107.4	3.58	.01
Clerical Aptitude Score	96.2	108.2	4.58	.01

The numbers of AWOL and Non-AWOL subjects are listed in Table 16 according to race, component, and physical status. Chi-square tests showed that AWOL subjects did not differ from Non-AWOL subjects in either racial composition or physical status. A significant difference was found between the two groups, however, in the proportion of RA and US personnel ($p<.01$). In the AWOL group, 24 out of 31 subjects (77%) were RA personnel; in the Non-AWOL group, 133 out of 268 subjects (50%) were RA personnel.

Table 16

Comparison Between AWOL and Non-AWOL Subjects on Background Characteristics During Initial Unit Assignment

Background Characteristic	Number of AWOL Subjects	Number of Non-AWOL Subjects	χ^2	*df*	Significance Level
Race					
White	27	256	3.33	1	NS
Black	4	10			
Component					
RA	24	133	7.53	1	.01
US	7	135			
Physical Status					
0	20	157			
1	10	94	0.59	2	NS
2	1	16			

PREDICTION OF MILITARY SKILLS RATINGS

To determine how well Military Skills ratings could be predicted from the different factors, correlation coefficients were computed between each factor and the rating of military skill. The ratings were available only during initial unit assignments. Only the data from Non-AWOL subjects were used, since ratings of AWOL subjects could have been biased by the company commander's knowledge that the subject was AWOL. Table 17 contains the correlation coefficients.

The correlation coefficients between the five CPI scales and Military Skills ratings ranged from .13 to .31. Four of the personality traits correlated significantly with Military Skills ratings—Dominance ($p<.01$), Responsibility ($p<.01$), Socialization ($p<.05$), and Achievement via Independence ($p<.05$).

Neither the TA-III scale nor the Career Orientation scale correlated significantly with Military Skills ratings. However, a significant correlation was obtained between rating of military skill and each background characteristic except physical status. The highest correlation was obtained with education ($r = .40$), while the correlations with General Technical score ($r = .33$), Mechanical Aptitude score ($r = .35$), and Clerical Aptitude score ($r = .35$) were slightly smaller. Race ($r = .15$) and Component ($r = .17$) showed the smallest correlations among those that were statistically significant.

Table 17

Correlation Coefficients Between Information Measures and Military Skills Ratings

Information Measures	N	Correlation Coefficient	Significance Level
California Psychological Inventory Scores			
Dominance	269	.25	.01
Responsibility	269	.31	.01
Socialization	269	.16	.05
Communality	269	.13	NS
Achievement via Independence	269	.17	.05
TA-III	265	−.01	NS
Career Orientation	266	−.02	NS
Background Characteristics			
Age	267	.30	.01
Education	267	.40	.01
General Technical Score	267	.33	.01
Mechanical Aptitude Score	267	.35	.01
Clerical Aptitude Score	267	.35	.01
Race	266	.15	.05
Component	268	.17	.05
Physical Status	267	.00	NS

PREDICTION OF LEADERSHIP POTENTIAL RATINGS

The Leadership Potential ratings, like the Military Skills ratings, were available only during initial unit assignments. As before, only ratings for Non-AWOL subjects were analyzed in order to eliminate bias created by the knowledge that the subject was AWOL.

Subjects were classified into one of four groups on the basis of their ratings: Group I—all Non-AWOL subjects who received a Leadership Potential rating of E1, E2, or E3; Group II—all Non-AWOL subjects with a Leadership Potential rating of E4, E5, or E6; Group III—all Non-AWOL subjects with a Leadership Potential rating of E7, E8, or E9; Group IV—all Non-AWOL subjects with a Leadership Potential rating of officer or warrant officer. Four subjects were classified in Group I, 124 in Group II, 49 in Group III, and 92 in Group IV.

Personality

The mean scores for the four groups on the five CPI scales are contained in Table 18. With only two exceptions, on each of the five traits the mean scores increased as the Leadership Potential of the group increased. Thus, the means for Group II were higher than the means for Group I, the means for Group III were higher than those for Group II, and so forth. Exceptions from this pattern occurred on the Communality scale where the mean for Group II (23.5) was slightly less than the mean for Group I (24.0), and on the Achievement via Independence scale where the mean for Group II (14.4) was again slightly less than the mean for Group I (14.5).

Table 18

Mean California Psychological Inventory Scores for Subjects by Leadership Potential Group

Personality Trait	Leadership Potential Group				*df*	Significance Level[a]
	I	II	III	IV		
Dominance	17.2	21.5	22.6	27.1	3,265	.01
Responsibility	21.2	23.7	25.3	28.2	3,265	.01
Socialization	27.0	31.7	32.6	35.3	3,265	.01
Communality	24.0	23.5	24.3	25.1	3,265	NS
Achievement via Independence	14.5	14.4	15.4	16.9	3,265	.01

[a]Tested by analysis of variance.

An analysis of variance was conducted for each scale to compare the four means. A significant difference ($p<.01$) between the means for the four groups was found on four of the five scales. Only on the Communality scale were the means for the four groups not significantly different.

To determine which means were significantly different on each of the four scales on which significant differences were obtained, *t*-tests were conducted between all pairs of means. No significant differences were found between the means for Group I and those for Groups II or III. However, the means for Group I were significantly lower than those for Group IV on the Dominance ($p<.01$), Responsibility ($p<.05$), and Socialization ($p<.01$) scales. No differences were found between the means obtained from Group II and those from Group III. However, the means obtained from Group II were significantly lower than those from Group IV on all five scales ($p<.01$). Finally, the means obtained from Group III were significantly lower than those obtained from Group IV on the Dominance ($p<.01$), Responsibility ($p<.01$), Socialization ($p<.05$), and Achievement via Independence ($p<.05$) scales.

Attitude Toward Army

The mean TA-III scores for subjects in the four groups show that the subjects in Group I had the most favorable attitude toward the Army (mean = 15.2), those in Group III were intermediate (mean = 15.1), while those in Groups II (mean = 14.8) and IV (mean = 14.8) had the least favorable attitude. The analysis of variance conducted to compare the difference between the means showed that the differences were not statistically significant.

Career Orientation

The number of subjects in each group having each of the three Career Orientation scores is contained in Table 19. A majority of the subjects in each group had a Career Orientation score of 0, while the smallest number of subjects had a score of 1. A chi-square test, however, showed that the proportion of subjects receiving each score in the four groups did not differ significantly.

Table 19

Comparison Between Leadership Potential Groups By Career Potential Score

Career Orientation Score	Number of Subjects			
	Group I	Group II	Group III	Group IV
0	3	87	33	64
1	1	11	4	5
2	0	24	11	23

χ^2=4.03 (*df*=6); NS

Background Characteristics

The mean age, education level, intelligence, and aptitude scores for the subjects in each of the four groups are contained in Table 20. Subjects in each group were older, on the average, than subjects in any of the groups receiving lower Leadership Potential ratings. An analysis of variance showed that the difference in age between the groups was statistically significant ($p<.01$). The difference between each pair of groups was shown by *t*-tests to be statistically significant except for the difference in age between Groups II and III.

Table 20

Mean Background Characteristic Scores for Subjects by Leadership Potential Group

Background Characteristics	Leadership Potential Group				*df*	Significance Level[a]
	I	II	III	IV		
Age (years)	18.2	19.6	19.9	21.1	3,263	.01
Education (years)	11.8	11.7	12.3	13.8	3,263	.01
General Technical Score	101.2	101.2	110.2	120.1	3,263	.01
Mechanical Aptitude Score	108.0	100.6	107.9	116.2	3,263	.01
Clerical Aptitude Score	103.0	101.2	109.4	117.3	3,263	.01

[a]Tested by analysis of variance.

With one exception, subjects in each group had more years of education than subjects in groups receiving lower Leadership Potential ratings. The subjects in Group I deviated from this pattern since they had slightly more years of education (11.8) than subjects in Group II (11.7 years). An analysis of variance showed that the difference in education between the groups was statistically significant ($p<.01$). The difference between Group IV and each of the other three groups was shown by *t*-tests to be statistically significant ($p<.01$). The difference between Groups II and III was also statistically significant ($p<.05$), although the differences between Group I and Groups II and III were not significant.

With the exception of Group I, which had the same mean as Group II, subjects in each group had higher GT scores, on the average, than subjects in groups receiving lower

Leadership Potential ratings. An analysis of variance showed that the difference in intelligence between the groups was statistically significant ($p<.01$). The difference between Group IV and each of the other three groups was shown by *t*-tests to be statistically significant ($p<.01$). The difference between Groups II and III was also statistically significant ($p<.01$), although the differences between Group I and Groups II and III were not significant.

With the exception of Group I, which had a mean Mechanical Aptitude score that was slightly greater than that received by Group II and Group III, subjects in each group had, on the average, higher Mechanical Aptitude scores than did subjects in groups having lower Leadership Potential ratings. An analysis of variance showed that the difference in Mechanical Aptitude between the groups was statistically significant ($p<.01$). The differences between Group IV and Groups II and III were found to be statistically significant ($p<.01$). The difference between Groups II and III was also statistically significant ($p<.05$), although Group I did not differ significantly from any of the other three groups.

With the exception of Group I with a Clerical Aptitude score that was greater than that for Group II, but less than that for Group III, subjects in each group had, on the average, higher Clerical Aptitude scores than subjects in groups having lower Leadership Potential ratings. An analysis of variance showed that the difference in Clerical Aptitude between the groups was statistically significant ($p<.01$). The difference between Group IV and Groups I, II, and III was found to be statistically significant ($p<.01$). The difference between Groups II and III was also significant ($p<.05$), although the differences between Group I and Groups II and III were not significant.

The number of subjects in each group are listed in Table 21 according to race, component, and physical status. A chi-square test showed that the groups did not differ significantly on any of these three factors.

Table 21

Comparison Between Leadership Potential Groups by Background Characteristics

Background Characteristics	Number of Subjects in Group I	Number of Subjects in Group II	Number of Subjects in Group III	Number of Subjects in Group IV	χ^2	*df*	Significance Level
Race							
White	3	117	45	91	7.26	3	NS
Black	1	6	2	1			
Component							
RA	3	65	23	42	2.05	3	NS
US	1	59	25	50			
Physical Status							
0	1	81	29	46			
1	3	36	15	40	9.06	6	NS
2	0	6	4	6			

DISCUSSION

A major purpose of the present study was to identify factors related to AWOL and to confirm relationships previously identified in studies of delinquency. The results showed that AWOL and Non-AWOL subjects differed on several of the factors studied. The groups were found to differ on all five personality scales during both basic combat training and initial unit assignment. Other factors on which they differed were years of education, intelligence, mechanical aptitude, and clerical aptitude.

The success of the five CPI scales in differentiating between AWOL and Non-AWOL subjects was especially important, since the scales were selected by military personnel with little or no previous training in psychological testing. Had these scales been selected by trained experts who were aware of the causes of military delinquency, perhaps even greater differences could have been found between the groups.

During both basic combat training and initial unit assignment, significant differences were obtained between AWOL and Non-AWOL subjects on all five CPI scales. The two groups were found to differ on only three of these scales when only the data for 17- and 18-year-old subjects were considered, and on four scales when only the data from 19-year-old and older subjects were considered. For the 17- and 18-year-old subjects, the groups differed only on the Responsibility, Socialization, and Achievement via Independence scales. For the subjects who were 19 years of age or older, the groups differed on the Dominance, Responsibility, Socialization, and Achievement via Independence scales. On the Communality scale, the mean score for AWOL subjects was lower than the mean for Non-AWOL subjects even though the difference was not statistically significant. This suggests that the failure to find a significant difference in Communality for 17- and 18-year-old soldiers was possibly due to the reduced size of the sample. There was no difference at all in the mean Dominance score obtained from 17- and 18-year-old AWOL and Non-AWOL subjects, suggesting that Dominance was not a relevant factor in soldiers of this age.

AWOL and Non-AWOL soldiers did not differ in their attitudes toward the Army. It was expected that AWOL soldiers would have had more negative attitudes toward the Army than Non-AWOL soldiers; however, no differences were found in the attitudes of the two groups either during basic combat training or during initial unit assignment. Since it is normally assumed that attitudes play a major role in determining behavior, these results are somewhat surprising. They suggest that further examination should be given to the relationship between attitudes and behavior among soldiers. One possible explanation for the failure to find a relationship between delinquent behavior and attitude toward the Army is that the other factors causing soldiers to go AWOL, or keeping them from going AWOL, were even more important than attitudes.

Although no relationship was found between attitudes and AWOL in the present study, attitudes may have a stronger effect on other forms of behavior in the Army. The results of a recent HumRRO study (15) show that attitude toward the Army is related to a tank commander's intention to reenlist in the Army. Tank commanders who decided to reenlist were found to have more favorable attitudes toward the Army than those who decided not to reenlist.

In studies conducted by HumRRO on the effects of the Army's VOLAR experiment[1], questionnaires were administered to 47,886 men during Basic Combat Training or Advanced Individual Training. Data were analyzed by comparing the AWOL rates of men having different personal characteristics. Among the items on the questionnaire were a number of attitude statements, and AWOL rates were computed for men having different attitudes toward the Army. The results obtained during Basic Combat

[1] These were studies of attitudes and absenteeism during the BCT-AIT cycle at Forts Ord and Jackson.

Training showed the relationship between attitudes and AWOL rate to be complex. As attitudes toward the Army became more positive, the AWOL rate declined, but only to a certain point; beyond that, as attitudes became more favorable, the AWOL rate increased. On the other hand, the AWOL rate continued to decrease steadily during Advanced Individual Training as attitudes became more favorable.

The discrepancy between the results of the present study and those of the VOLAR studies could possibly be accounted for by the difference between the methods used in the two investigations. During the present study, the mean attitude score for AWOL subjects was compared to the mean score for Non-AWOL subjects. In the VOLAR studies, AWOL rates were compared for soldiers having different attitude scores. The results of the VOLAR studies show that there is a nonlinear relationship between attitudes and AWOL rate. That is, the AWOL rate was found to be higher for subjects having extreme positive and negative attitudes toward the Army than for subjects having intermediate attitudes. When the attitudes of AWOL and Non-AWOL subjects are compared, the extreme attitude scores obtained from subjects in the AWOL group would be expected to show the same mean as the scores obtained from subjects in the Non-AWOL group. However, the variance of the attitude scores for AWOL subjects would be expected to be greater than the variance of the scores for Non-AWOL subjects. An F-test comparing the variance of the scores for AWOL subjects during Basic Combat Training (23.4) with the variance of the scores for Non-AWOL subjects (21.7) showed, however, that the variances were not significantly different. Thus, the differences in the results of the two investigations cannot be accounted for on the basis of the difference between the two methods of analysis.

Career Orientation was found to be related to AWOL for soldiers 19 years of age or older, but not for 17- and 18-year-old soldiers. Using the entire sample, AWOL and Non-AWOL subjects did not differ in their career orientations either during basic combat training or during initial unit assignments. A significant difference in career orientation was found between AWOL and Non-AWOL soldiers during basic combat training, but only for soldiers 19 years of age or older. Apparently, older soldiers who plan to make the Army their career are more likely to go AWOL during basic combat training than soldiers of the same age who do not want to make the Army their career. The reason why this relationship between career orientation and AWOL was found only for soldiers 19 years of age or older cannot be determined from the data. However, these findings suggest that, in some circumstances, career orientation could be used to predict which soldiers will go AWOL. Whether or not 19-year-old and older soldiers who plan a career in the Army are also more likely to go AWOL during initial unit training cannot be determined because the sample of soldiers who went AWOL during initial unit assignments is too small to be analyzed by age. Further research on this question is warranted by the nature of the data obtained in the present study.

Age was another factor that gave inconsistent results. No difference was found in the average age of AWOL and Non-AWOL soldiers using the entire sample during basic combat training. A significant difference in age between AWOL and Non-AWOL subjects was found during basic combat training for soldiers who were 17 and 18 years of age, but not between those who were 19 years of age or older. Thus, it appears that soldiers who enter the Army immediately after their 17th birthday are more likely to go AWOL than soldiers entering at other ages. Perhaps the 17-year-old who enters the Army just after his birthday does so to escape the problems of civilian life. His inability to handle these problems in civilian life may further prevent him from handling corresponding problems in military life. It appears from this research that the AWOL rate can be reduced by not accepting recruits at their 17th birthday. However, this solution may not work if it merely causes a slight delay in enlistment; if these same men enter the Army just a few months later, they may still be unable to handle the personal problems they will face in the Army.

During initial duty assignment, AWOL and Non-AWOL soldiers were again found to differ in age. At this time of service, however, AWOL is not limited to the extremely young soldier. The average age of the AWOL soldier during initial unit assignment was 18.2 years; this was still two years younger than the average age of the Non-AWOL soldier. Thus, it appears that the very youngest soldiers are most likely to go AWOL during basic combat training when supervision is greatest. When supervision is reduced, however, the range of young soldiers likely to go AWOL becomes greater. Therefore, age can be used as a factor to predict which soldiers will go AWOL, but only if time of service is taken into account simultaneously.

In the VOLAR studies, significant differences were found between the AWOL rates of soldiers of various ages during training. Soldiers 17 years of age or younger had the highest AWOL rate. The AWOL rate decreased with age until ages 22 and 23, but then increased for soldiers 24 years of age or older. In the present study, significant difference was found during basic combat training between the mean ages of AWOL and Non-AWOL soldiers who were 17 and 18 years of age, but not for soldiers older than 18. These results could be accounted for by the results of the VOLAR studies. Since the AWOL rate was found in the latter to decrease between the ages of 17 and 18, a significant difference in the average age would be expected between AWOL and Non-AWOL soldiers in this age group. However, since the AWOL rate increases for soldiers over 23 years of age, the AWOL rate would be highest for the youngest and oldest soldiers in the age group 19 years and older, and lowest for those intermediate in age. When the average age of AWOL and Non-AWOL soldiers is compared, a significant difference could not then be expected. However, the variance of ages for AWOL subjects would be expected to be larger than the variance for Non-AWOL subjects. An F-test showed that the variance of AWOL subjects (11.21) was significantly greater ($p<.01$) than the variance of Non-AWOL subjects (2.86), supporting this explanation of the difference between the results of the two studies.

Clear and consistent relationships were found between years of education and AWOL. During both basic combat training and initial unit assignment, soldiers who went AWOL were found to have fewer years of education than soldiers who did not go AWOL. A similar finding was obtained during the VOLAR studies in which the AWOL rate was found to decrease beginning at the seventh year of school.

Equally clear and consistent relationships were found between intelligence and AWOL. During both basic combat training and initial duty assignment, soldiers who were AWOL were less intelligent than soldiers who did not go AWOL. Similar findings were obtained using the two aptitude scales. Soldiers who went AWOL during basic combat training or during initial unit assignment had less mechanical aptitude and clerical aptitude than soldiers who did not go AWOL. These relationships were found for both the younger and older subjects for clerical aptitude, but only for the older subjects for mechanical aptitude.

No statistically significant differences were found in the proportions of Negroes and Whites among AWOL and Non-AWOL soldiers. Thus, the data suggest that race may not be an important factor in causing a soldier to go AWOL. However, during the VOLAR studies, statistically significant differences were found in the AWOL rates of Negro and White soldiers; an AWOL rate of 3.23 was found for White soldiers compared to a rate of 5.11 for Negro soldiers. In the present ESPRIT study, the AWOL rate during training was 2.8 for White soldiers compared to a rate of 4.7 for Negro soldiers. Thus, the rates and the differences between them, determined in the two studies are quite similar. It is possible that the statistical significance of the results obtained in the VOLAR studies was due either to the larger sample size in VOLAR or to a difference in the methods used in analysis of the data.

A tendency was found for RA personnel to go AWOL more than US personnel. During both basic combat training and initial duty assignment, a greater proportion of

RAs were found in the AWOL sample than in the Non-AWOL sample. This suggests that the AWOL rate may continue to increase once the draft is terminated. The present sample of RA personnel includes not only men who want to make the Army their career, but men who volunteered for duty only because they would have been drafted if they did not enlist. Thus, many of the RA soldiers in the sample were more like US soldiers than RA soldiers. Similar results were obtained during the VOLAR studies.

Physical status, the remaining factor that was explored, was found to be unrelated to AWOL.

The results of this study suggest that personality scales may be very effective in predicting which soldiers will go AWOL. To determine whether or not AWOL and Non-AWOL soldiers differ on the remaining scales of the CPI or on other personality tests requires additional research. However, the consistent differences between AWOLs and Non-AWOLs in the present study suggest that personality may be an especially important factor in determining who will go AWOL.

One reason for dividing the sample of subjects from basic combat training into different age groups was to determine whether the same factors are related to AWOL at different ages. Generally, it appears that the factors that cause younger soldiers to go AWOL are the same as those that cause older soldiers to go AWOL. Slight differences were found in the personality scales that differentiated between AWOLs and Non-AWOLs in the two age groups. In addition, career orientation appeared to be an important factor only for older subjects, but no important differences were found among the other factors that differentiated between AWOL and Non-AWOL soldiers (except age itself).

The fact that soldiers who recently became 17 years of age were particularly likely to go AWOL suggests that soldiers of this age should be studied more carefully. It is unlikely that age itself caused these men to go AWOL more often than men who were only slightly older. Whether their high AWOL rate was due to inability to handle personal problems, immaturity, or some other factor cannot be determined from the data. This problem also deserves closer examination.

The use of suspense actions to obtain AWOL information during initial duty assignment was generally very unsuccessful. AWOL reports were received for only 16% of the initial sample of basic trainees, and many of these were unusable. Since there was no way of determining whether these 16% differed systematically from the remaining 84%, it is possible that the subjects in the sample are not representative of all soldiers in their initial duty assignments. For example, there could have been a greater chance that the suspense action for AWOLs would have been noticed more often than for Non-AWOLs. Any factor that could cause the suspense action of one type of soldier to be noticed more often than the suspense action for another type of soldier could have caused the sample to differ in some important respect from other soldiers in their initial duty assignment. It is suggested, therefore, that other methods be developed to obtain AWOL data during this period of service. One such method is being assessed in the HumRRO study testing the effectiveness of multiple discriminant function analysis as a method for predicting AWOL.

Another purpose of the present study was to determine whether the same factors that could be used to predict AWOL could also be used to predict military skills ratings and leadership potential ratings. The results show that the factors related to AWOL are, in fact, related to both military skills and leadership potential ratings. Age, education, intelligence, and aptitude were related to all three forms of adjustment to the Army. Personality was also related to the three forms of adjustment. Attitude toward the Army, race, and physical status were unrelated to any of these three forms of adjustment. Military component seemed somewhat related to AWOL and military skills, but not to leadership potential.

One weakness in the present study occurred as a result of using ratings to measure military skills and leadership potential. Normally, objective measures should be used wherever possible to help ensure that the data will be reliable and valid. Subjective ratings of the sort used in this study often are made less accurate by the inability of the rater to assess the person being judged, or by biases in the rater that could affect his judgments. This problem is further compounded in the present study by the lack of control in selecting the personnel who make the ratings. While the instructions requested that the ratings be made by officers or NCOs who normally prepare and review evaluation ratings, there was no assurance that the rater complied with this request. It is, therefore, important to consider these data as being tentative in nature. Before they can be accepted with assurance, new data will be required in which information on military skills and leadership potential is obtained in a more controlled and objective manner.

In summary, several factors have been found to be related to AWOL, military skills, and leadership potential, while several other factors were found to be unrelated. The importance of personality as a factor in predicting AWOL confirms Datel's (8) earlier finding that the AWOL soldiers could be differentiated from Non-AWOL soldiers by using the Socialization scale of the CPI. The results also confirm findings from the U.S. Naval Retraining Command (3, 4, 5, 6, 7) that personality items can differentiate between delinquents and nondelinquents. Similarly, the findings pertaining to age and education confirm the results obtained earlier by the Navy (9, 10) concerning factors related to delinquency. The results also confirm the results of studies on civilians (12, 13) that showed a relationship between the CPI and delinquency. If multiple discriminant function analysis is found to be an effective technique for combining this type of information for predicting AWOL, the reamining step will be to identify additional factors and to combine them using the statistical technique.

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AND
APPENDICES

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Appendix A

AWOL INFORMATION FORM

HumRRO TRANS. FORM I-1

THIS FORM IS TO BE COMPLETED ONLY IF THE MAN NAMED BELOW IS ON ACTIVE DUTY STATUS ON THE SUSPENSE DATE SPECIFIED BELOW.

Name _____ SSN _____ Suspense Date _____

1. Please provide the following information about the above named soldier:
   a. To what organization is he currently assigned? _____
   b. On what date was he assigned? _____
   c. What is his current pay grade? ___ ; his MOS? _____ ; his duty position title? _____
   d. Has his period of committed active duty ever been extended by reason of AWOL or other misconduct? Yes _____ No _____
   e. If the response to the preceding question was "Yes," please give date, length and cause of each extension.

Date	Length	Cause
_____	_____	_____
_____	_____	_____

2. With reference to the EM named, please complete the HumRRO Career-Potential Rating Report, which appears on the back page of this Form. The individual officers or NCO's who would normally prepare and review the evaluation ratings of this man, should be employed for this purpose.
3. Forward completed forms to: Chief
   US Army Armor Human Research Unit
   ATTN: ES-74
   Fort Knox, Kentucky 40121
4. When this suspense action has been completed, the Notice of Suspense Action, the letter to the Commanding Officer of the EM named, and the HumRRO Form that is not applicable to the man, will be removed from the Record Jacket and destroyed.

Appendix B

TA-III QUESTIONNAIRE

Name_____ Rank_____ Serial No._____

HumRRO Division No. 2

October, 1969
Form TA-III, 74-1

Section I

We would like to know how generally favorable or unfavorable you feel about the different things listed at the bottom of this page—that is, how much you like or dislike each thing. You may not know much of anything about some of the things listed, so you may have to depend on things you have heard from other people, or even on hunches. Show how you feel about each thing by putting one of the numbers from 1 to 7 in front of it.

Here is what your numbers should mean:

1. Feel extremely favorable.
2. Feel quite favorable.
3. Feel slightly favorable.
4. Feel neither favorable nor unfavorable.
5. Feel slightly unfavorable.
6. Feel quite unfavorable.
7. Feel extremely unfavorable.

____(a) The U.S. Army
____ b. Labor unions
____(c) Most Army sergeants
____ d. Going to school
____(e) Life as a soldier
____ f. Managers, bosses
____(g) Army rules and regulations
____ h. Teachers
____ i. Life as a civilian
____ j. The U.S. Air Force
____ k. Night clubs
____(l) Most Army officers
____ m. The police
____ n. Hunting, fishing

Section II

In this section there are a number of statements about the Army. Read each statement and decide how much you agree or disagree with it. Then check the answer which is closest to the way you feel.

1. The Army makes a man of you.

(1)____Agree completely.
(2)____Agree moderately.
(3)____Agree slightly.
(4)____Disagree slightly.
(5)____Disagree moderately.
(6)____Disagree completely.

2. Most Army officers are well qualified for their jobs.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

3. The Army does everything possible to put men in the jobs for which they are best suited.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

4. The Army is run as efficiently as most large civilian organizations

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

5. Most Army NCOs are willing to go through anything they ask their men to go through.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

6. In the Army, nobody seems to "give a damn" about anything.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

7. The Army is not interested in the welfare of individual soldiers.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

8. Army officers are generally understanding of the needs and problems of their men.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

9. The discipline you get in the Army is good for you.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

10. Whatever job you get in the Army, you can be sure that you will be well trained when you start performing your duties.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

11. The Army encourages men with ability and initiative.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

12. Army officers are generally as well qualified as men who have civilian jobs with the same amount of responsibility.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___A[illegible] slightly.
(4) ___D[illegible] slightly.
(5) ___[illegible] moderately.
(6) ___Dis[illegible] completely.

13. Army NCOs are generally as well qualified as men who have civilian jobs with the same amount of responsibility.

(1) ___Agree completely.
(2) ___Agree moderately.
(3) ___Agree slightly.
(4) ___Disagree slightly.
(5) ___Disagree moderately.
(6) ___Disagree completely.

14. As long as you "keep your nose clean," you'll get ahead in the Army just as fast whether you really work hard or not.

(1) ___ Agree completely.
(2) ___ Agree moderately.
(3) ___ Agree slightly.
(4) ___ Disagree slightly.
(5) ___ Disagree moderately.
(6) ___ Disagree completely.

15. Most Army NCOs really understand how to get the best out of their men.

(1) ___ Agree completely.
(2) ___ Agree moderately.
(3) ___ Agree slightly.
(4) ___ Disagree slightly.
(5) ___ Disagree moderately.
(6) ___ Disagree completely.

16. Most Army NCOs are well qualified for their jobs.

(1) ___ Agree completely.
(2) ___ Agree moderately.
(3) ___ Agree slightly.
(4) ___ Disagree slightly.
(5) ___ Disagree moderately.
(6) ___ Disagree completely.

Section III

1. How hard has it been for you getting used to Army life and discipline?

(1) ___ Very hard.
(2) ___ Fairly hard.
(3) ___ Neither hard nor easy.
(4) ___ Fairly easy.
(5) ___ Very easy.

2. Right now, what do you think the chances are that you will reenlist in the Army after your present tour of duty?

(1) ___ Will definitely *not* reenlist.
(2) ___ Will probably *not* reenlist.
(3) ___ Might reenlist.
(4) ___ Will probably reenlist.
(5) ___ Will almost certainly reenlist.

3. If things work out for you in the Army, what are the chances that you will reenlist when your present tour is finished?

(1) ___ I will almost certainly reenlist.
(2) ___ I will probably reenlist.
(3) ___ There is a good chance that I will reenlist.
(4) ___ I will probably not reenlist.
(5) ___ I will definitely not reenlist.

Appendix C

MILITARY SKILLS SCALE

HumRRO CAREER-POTENTIAL RATING REPORT (EM)

THE INFORMATION REQUESTED BELOW IS FOR RESEARCH PURPOSES ONLY, AND WILL IN NO WAY BE MADE A PART OF THE PERMANENT RECORD OF THE EM NAMED.

Please rate the EM named on each of the following characteristics:

	Out-Standing	Above Average	About Average	Low Average	Unsatis-factory
a. Knowledge of his Job	_____	_____	_____	_____	_____
b. Performance of his Job	_____	_____	_____	_____	_____
c. Adaptability on his Job	_____	_____	_____	_____	_____
d. General Responsibility	_____	_____	_____	_____	_____
e. Personal Relations Skills	_____	_____	_____	_____	_____
f. Leadership Skills	_____	_____	_____	_____	_____
g. Acceptance of Authority	_____	_____	_____	_____	_____
h. Achievement Drive	_____	_____	_____	_____	_____

Appendix D

LEADERSHIP POTENTIAL RATING SCALE

Please indicate below the highest grade at which you think this man *could function effectively* if he were to continue in an Army career. In giving your answer, please disregard the man's present career intentions, the likelihood that he will remain in the Army, or the availability of promotions.

a. I believe this man has officer or warrant officer potential

b. I believe this man has the potential to perform effectively at the level of:

E1 _____ E2 _____ E3 _____

E4 _____ E5 _____ E6 _____

E7 _____ E8 _____ E9 _____

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13. ABSTRACT

During basic combat training, 2,072 enlisted men were classified as being either AWOL or Non-AWOL. Three hundred of these men were similarly classified after 90 days in their initial unit assignment. AWOL and Non-AWOL soldiers were then compared to determine whether certain factors could be used to predict which soldiers would go AWOL, or could predict ratings of acquired military skills and of leadership potential. The results indicate that AWOL and Non-AWOL subjects differed on personality, education, intelligence, aptitude, and military component. No differences were found in attitude toward the Army, race, or physical status. AWOL and Non-AWOL subjects differed in age during initial unit assignment, but only among 17- and 18-year-old soldiers during basic combat training. Only 19-year-old and older subjects differed in career orientation. In general, the same factors that were related to AWOL were related also to military skill and leadership potential.

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14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
Attitudes						
Delinquency						
Leadership						
Motivation						
Personality						
Prediction						

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1 CINC USA PACIFIC ATTN G3 CDC APO SAN FRAN 96610
1 CG US ARMY JAPAN APO 96343 SAN FRAN ATTN G3
10 CG USA FORCES SOUTHERN COMD ATTN SCARCD CZ
1 CG USA ALASKA ATTN AKACD APO 98749 SEATTLE
2 CG US ARMY EUROPE APO 09403 NY ATTN OPNS DIV
1 CG USA AD COMD ENT AFB ATTN ADGPA COLO
2 CG 1ST ARMY ATTN DCSOT FT MEADE MD
1 CG 3RD ARMY ATTN DCSOT FT MCPHERSON
4 CG SIXTH ARMY PRES OF SAN FRAN ATTN AMOPS-T2
1 CG EUSA ATTN AG-AC APO 96301 SAN FRAN
2 CG EUSA ATTN G-3 APO 96301 SAN FRAN
1 CLIN PSYCHOL SERV DEPT OF NEUROPSYCHIAT WALTER REED GEN HOSP
1 DIR HEL APG MD
1 CG USA CDC EXPERIMENTATION COMD FT ORD
2 ENGNR PSYCHOL LAB PIONEERING RES DIV ARMY NATICK LABS NATICK MASS
1 TECH LIB ARMY NATICK LABS NATICK MASS
2 INST OF LAND CBT ATTN TECH LIB FT BELVOIR VA
1 REDSTONE SCIENTIFIC INFC CTR US ARMY MSL COMD ATTN CHF DOC SEC ALA
1 CO FT HUACHUCA SPT COMD USA ATTN TECH REF LIB
1 SIXTH USA LIB DEPOT BLDG M 13 14 PRES OF SAN FRAN
1 PLNS OFCR PSYCH HQUTRES USACDCEC FT ORD
5 CG FT ORD ATTN G3 TNG DIV
2 DIR WRAIR WALTER REED ARMY MED CTR ATTN NEUROPSYCHIAT DIV
1 CO HQ ARMY ENLISTED EVAL CTR FT BENJ HARRISON
1 TECH LIB BOX 22 USACDC EXPERIMENTATION COMD FT ORD
1 HUMAN FACTORS TEST DIV (AOMZ) USAF HOSP EGLIN AFB
1 CO FRANKFORD ARSNL ATTN SMUFA-N6400/232-4 PA
3 6TH RGN USARADCOM FT BAKER
1 4TH ARMY MSL COMD AIR TRANSPORTABLE SAN FRAN
2 CO PICATINNY ARSNL DOVER N J ATTN SUMPA VCI
1 LIB DEF SUPPLY AGCY CAMERON STA VA
2 CO USA CDC AG AGCY FT BENJ HARRISON IND
1 REF M MS IS NASA ALA
1 CO USA CBT DEVEL COMD TRANS AGCY FT EUSTIS
1 CO ARMY CDC INF AGY FT BENNING
1 CO ARMY CDC ARMOR AGY FT KNOX
1 CO US ARMY CDC AVN AGCY FT RUCKER
1 DIR OF INTERN TNG USA LOG MGT CTR FT LEE
3 CO USA TNG CTR (FA) ATTN AKPSITC-TT FT SILL
1 CG USA TNG CTR & FT LEONARD WOOD ATTN ACOFS G3
1 CG USA INF CTR ATTN AJIGT-T FT BENNING
1 CG USA TNG CTR INF ATTN ACOFS G3 FT DIX
1 CG USA TNG CTR ATTN ACOFS G3 FT JACKSON
1 CG USA TNG CTR INF ATTN ACOFS G3 FT LEWIS
1 CG USA TNG CTR INF & FT ORD ATTN ACOFS G3
48 CG USA TNG CTR INF ATTN ACOFS G3 FT POLK
5 CO USA MED TNG CTR ATTN DIR OF TNG FT SAM HOUSTON
20 CG USA AD CTR ATTN G3 FT BLISS
1 CG USA TNG CTR INF ATTN-ACOFS G3 FT CAMPBELL
3 LIB ARMY WAR COLL CARLISLE BKS
1 CO USA INTELL SCH ATTN AHBH-S-AO FT HUACHUCA
1 COMDT COMD & GEN STAFF CO FT LEAVENWORTH ATTN ARCHIVES
1 DIR OF MILIT PSYCHOL & LDRSHP US MILIT ACAD WEST POINT
1 US MILIT ACAD WEST POINT ATTN LIB
1 COMDT ARMY AVN SCH ATTN DIR OF INSTR FT RUCKER
1 COMDT ARMY SECUR AGY TNG CTR & SCH FT DEVENS ATTN LIB
1 COMDT INDSTR COLL OF THE ARMED FORCES FT MCNAIR
2 COMDT NATL WAR COLL FT LESLEY J MCNAIR ATTN CLASSF RECORDS BR LIB
1 STIMSON LIB MED FLD SERV SCH BROOKE ARMY MED CTR FT SAM HOUSTON
5 COMDT THE ARMOR SCH ATTN DOI FT KNOX
1 COMDT ARMY ARMOR SCH FT KNOX ATTN WEAPONS DEPT
1 LIB USA ARMOR SCH FT KNOX
1 COMDT USA CHAPLAIN SCH ATTN DOI FT HAMILTON
1 COMDT ARMY CHEM CORPS SCH FT MCCLELLAN ATTN EDUC ADV
1 COMDT USA FIN SCH ATTN CHF DOC DEV LIT PLN DIV OOOI IND
1 USA FINANCE SCH FT BENJ HARRISON ATTN EDUC ADV
4 COMDT ADJ GEN SCH FT BENJ HARRISON ATTN EDUC ADV
1 COMDT USAIS ATTN EDUC ADV FT BENNING
1 COMDT USAIS ATTN AJIIS-D-EPRD FT BENNING
1 LIB ARMY QM SCH FT LEE
1 COMDT USA QM SCH FT LEE ATTN EDUC ADV
1 COMDT ARMY TRANS SCH FT EUSTIS ATTN EDUC ADV
1 COMDT USA MIL POLICE SCH ATTN PLNS &PROG OOOI FT GORDON
2 COMDT US ARMY SOUTHEASTERN SIG SCH ATTN EDUC ADV FT GORDON
1 COMDT USA AD SCH ATTN DOI FT BLISS
1 CO USA ORD CTR & SCH OFC OF OPS ATTN AHBN-O APG MD
5 ASST COMDT ARMY AIR DEF SCH FT BLISS ATTN CLASSF TECH LIB
3 CG USA FLD ARTY CTR & FT SILL ATTN AVN OFCR
1 COMDT ARMED FORCES STAFF COLL NORFOLK
1 COMDT USA SIG CTR & SCH ATTN DOI FT MONMOUTH
1 COMDT JUDGE ADVOCATE GENERALS SCH U OF VA
1 OPTY COMDT USA AVN SCH ELEMENT GA
1 OPTY ASST COMDT USA AVN SCH ELEMENT GA
1 USA AVN SCH ELEMENT OFC OF DIR OF INSTR ATTN EDUC ADV GA
1 EDUC CONSLT ARMY MILIT POLICE SCH FT GORDON
6 COMDT USA ENGR SCH ATTN EDUC ADV AHBBES-EA FT BELVOIR
1 DIR OF INSTR US MIL ACAD WEST POINT NY
1 DIR OF MILIT INSTR US MILIT ACAD WEST POINT
1 USA INST FOR MIL ASSIST ATTN LIB BLDG 1ST2808 FT BRAGG
4 USA INST FOR MIL ASSIST ATTN COUNTERINSURGENCY DEPT FT BRAGG
1 COMDT DEF MGT SCH FT BELVOIR
2 COMDT USA MSL & MUN CTR & SCH ATTN CHF OFC OF OPS REDSTONE ARSNL
2 COMDT US WAC SCH US WAC CTR ATTN AJMCT FT MCCLELLAN
2 HQ ABERDEEN PG ATTN TECH LIB
1 CO USA INTELL CTR & SCH ATTN DIR OF ACADEMIC OPS FT HUACHUCA
1 CO USA INTELL CTR & SCH ATTN DIR CF DOC & LIT FT HUACHUCA
1 COMDT USA C&GSC OFC OF CHF OF RESIDENT INSTR FT LEAVENWORTH
1 COMDT USA CA SCH ATTN OFC OF DOCTRINE DEVEL LIT & PLNS FT BRAGG
1 COMDT USA CA SCH ATTN DOI FT BRAGG
1 COMDT USA CA SCH ATTN EDUC ADV FT BRAGG
1 COMDT USA CA SCH ATTN LIB FT BRAGG
1 COMDT USA SCH & TNG CTR ATTN ACOFS G3 TNG DIV FT MCCLELLAN
1 COMDT USA SCH & TNG CTR ATTN ACOFS G3 PLNS & OPS DIV FT MCCLELLAN
13 COMDT USA INST FOR MIL ASSIST ATTN DOI FT BRAGG
1 LIBN USAIS FT BENNING
3 COMDT USA FLD ARTY SCH ATTN DOI FT SILL
1 COMDT USA ARTY SCH ATTN EDUC SERVICES DIV FT SILL
1 COMDT USA ARTY SCH ATTN EDUC ADV FT SILL
1 COMDT USA TRANS SCH ATTN DIR OF DOC & LIT FT EUSTIS
1 COMDT USA TRANS SCH ATTN LIB FT EUSTIS
1 USA INST FOR MIL ASST ATTN EDUC ADV FT BRAGG
1 CUMDT USA C&GSC ATTN ATSCS-DJ (SP&AR)
1 COMDT ARMY WM SCH OFC DIR OF NUNRESID ACTVY ATTN TNG MEDIA DIV VA
1 COMDT USA ARTY SCH ATTN LIB FT SILL
1 CG USA SCH & TNG CTR ATTN ACOFS G3 FT GORDON
1 DIR OF GRAD STUD & RSCH ATTN BEHAV SCI REP USAC&GSC
1 COMDT USA AD SCH ATTN AKHAAS-DL-EA FT BLISS
2 DIR BRGD 4 BN OPNS DEPT USAIS FT BENNING
1 LEADERSHIP COM CO OPS DEPT US ARMY INF SCH FT BENNING
1 DIR COMM ELEC USAIS FT BENNING
1 DIR ARM-AIR MOBILITY DEPT USAIS FT BENNING
2 DIR COMPANY TACTICS DEPT USAIS FT BENNING
1 CG USA SIG CTR & SCH ATTN ATSSC-OP-CO FT MONMOUTH
1 CG USA SIG CTR & SCH ATTN ATSSC-EA FT MONMOUTH
1 SECY OF ARMY, PENTAGON
1 DCS-PERS DA ATTN CHF C+S DIV
1 DIR OF PERS STUDIES & RSCH DOCSPER DA WASH DC
2 ACSFOR DA ATTN CHF TNG DIV WASH DC
1 CHF OF ENGNRS DA ATTN ENGTE-T
1 HQ ARMY MAT COMD R+D CNCTE ATTN AMCRD-RC
1 CLIN PSYCHOL CONSLT OFC OF CHF PSYCHIAT & NEUROL CONSLT
2 CG ARMY MED R+D COMD ATTN BEHAV SCI RES BR
1 US ARMY BEHAVIOR & SYS RSCH LAB ATTNCRD-AR ARL VA
1 OPO PERS MGT DEV OFC ATTN MOS SPC (NE& EQUIP) OPOMD
1 PROVOST MARSHAL GEN DA
1 OFC RESERVE COMPON DA
2 CG USA SEC AGCY ARL MALL STA ATTN: AC OF S G1 VA
12 ADMIN DOC ATTN: TCA (HEALY) CAMERON STA ALEX., VA. 22314
1 CO US ARMY MED RES LAB FT KNOX
1 CHF OF R+D DA ATTN CHF TECH + INDSTR LIAISON OFC
1 CO USA CDC MED SERV AGCY FT SAM HOUSTON
2 CG ARMY MED R+D COMD ATTN MEDDH-SR
1 USA BEHAVIOR & SYS RSCH LAB ATTNCRD-AIC ARL VA
2 TNG & DEVEL DIV DOCSPERS
1 CAREER MGT BR ATTN P DETIENNE CAMERON STA ALEX VA
1 USA LIB DIV-TAGU ATTN ASDIKS
1 PRES ARMY INF BD FT BENNING ATTN FE+SP DIV
1 PRES ARMY MAINT BD FT KNOX
2 PRES ARMY ARTY BD FT SILL
1 CG CONARC ATTN COL E M HUDAK ATIT-SA FT MONROE
15 CG CONARC ATTN ATIT-STM FT MONROE
2 CG CONARC ATTN LIB FT MONROE
1 USA ARCTIC TEST CTR CHF INSTR & TEST METH DIV SEATTLE
1 CHF USA AD HRU FT BLISS
1 CHF USA ARMOR HRU FT KNOX
1 CHF USA AVN HRU FT RUCKER
1 CHF USA INF HRU FT BENNING
1 CHF USA TNG CTR HRU PRES OF MONTEREY
3 CG 4TH ARMORED DIV ATTN DCSOT APO NY 09326
1 CO 3D ARMORED CAV REGT FT LEWIS
1 CO 14TH ARMORED CAV REGT ATTN AVN OFCR APO 09146 NY
1 1ST ARMORED DIV HQ & HQ CO FT HOOD ATTN AC OF S G2
5 CO 1ST BN 63RD ARMOR 1ST INF DIV ATTN S3 FT RILEY
2 CO 1ST BN 64TH ARMOR 3RD INF DIV ATTN S3 APO NY 09031
5 CO 2ND BN 68TH ARMOR 8TH INF DIV ATTN S3 APO NY 09034
1 CO COMPANY A 30 BN 320 ARMOR 3D ARMORED DIV APO NY
1 CO 5TH BN 33D ARMOR ATTN S3 FT KNOX
1 CO 3RD BN 68TH ARMOR 8TH INF DIV ATTN S3 APO NY 09029
1 CO 3RD BN 37TH ARMOR 4TH ARMORED DIV ATTN S3 APO NY 09066
2 CALIF NG 40TH ARMORED DIV LOS ANGELES ATTN AC OF SG3
1 55TH COMD HQ DIV ARMY NG JACKSONVILLE FLA
1 CG HQ 27TH ARMORED DIV NY AIR NG SYRACUSE
1 TEXAS NG 49TH ARMORED DIV DALLAS
3 CG ARMY ARMOR CTR FT KNOX ATTN G3 AIBKGT
1 CG 3RD INF DIV ATTN ACOFS G3 APO NY 09036
1 CG 7TH INF DIV ATT ACOFS G2 APO SAN FRAN 96207
1 CG 8TH INF DIV ATTN ACOFS G2 APO NY 09111
3 CG 4TH INF DIV (MECH) & FT CARSON ATTN ACOFS G3
1 DA HQS FT CARSON & HQS 4TH INF DIV (MECH) ATT MAJ HARRIS
3 CG 82ND ABN INF DIV ATTN ACOFS G3 FT BRAGG
1 CG XVIII ABN CORPS ATTN ACOFS G3 FT BRAGG
1 CO 197TH INF BRGD FT BENNING ATTN S3
1 CO 1ST BN (REINF) ATTN S3 FT MYER
1 CO HDQTRS 2ND BN 6TH US INF REGT ATTN S3 APO NY 09742
7 CO 3RD BN 6TH INF REGT ATTN S3 APO NY 09742
1 CO 171ST INF BDE ATTN S3 APO SEATTLE 98731
1 CO 1ST BN 39TH INF 8TH INF DIV ATTN S3 APO NY 09034
1 CO 2ND BN 15TH INF 3RD INF DIV ATTN S3 APO NY 09026
5 CG 1ST INF DIV ATTN ACOFS G3 FT RILEY
5 CO 1ST BN (MECH) 52ND INF 198TH INF 9DE ATTN S3 APO SAN FRAN 96219
1 CO 4TH BN (MECH) 54TH INF ATTN S3 FT KNOX
1 CO USA PARTIC GP USA TNG DEVICE CTR FLA
1 DA OFC OF ASST CHF OF STAFF FOR COMM-ELCT ATTN CETS-6 WASH
1 CHF MED RES PROJ ARMY HOSP US MILIT ACAD WEST POINT
1 CG MILIT DIST OF WASHINGTON
2 DA USA ADV GP (ARNGUS) RALEIGH NC
1 USA RECRUITING COMD HAMPTON VA
1 DIR ARMY LIB PENTAGON
1 CHF OF MILIT HIST DA ATTN GEN REF BR
1 CO USA 10TH SPEC FORCES GP FT DEVENS
1 CO 24TH ARTY GP (AD) ATTN S3 RI
1 CG 31ST ARTY BDE AD ATTN S3 PA
1 CO 28TH ARTY GP AD ATTN S3 SELFRIDGE AFB
1 HQ NIAGARA-BUFFALO DEF 31ST ARTY BRGD AIR DEF LOCKPORT
1 HQS 45TH ARTY BDE AD ATTN S3 ARL HTS ILL
1 CO 35TH ARTY BDE AD ATTN S3 FT MEADE MD

1 CG 101ST AVN DIV (AIRMOBILE) ATTN ACOFS G3 APO SAN FRAN 96383
1 CG 1ST CAV (AIRMOBILE) ATTN ACOFS G3 APO SAN FRAN 96383
1 US ARMY TROPIC TEST CTR PO DRAWER 942 ATTN REHAV SCIEN CZ
1 CO USAFAAC ATTN S3 FT SILL
10 CG III CORPS & FT HOOD ATTN G3 SEC FT HOOD
30 CO 1ST ARMORED DIV ATTN G3 SEC FT HOOD
30 CG 2D ARMORED DIV ATTN G3 SEC FT HOOD
25 CO 13TH SUPT BGDE ATTN S3 SEC FT HOOD
1 CG USAFAC & FT SILL ATTN AKPSIGT-TNTN
20 CO III CORPS ARTY ATTN G3 SEC FT SILL
15 CO 1ST AIT BGDE ATTN G3 SEC FT BLISS
8 CG USATCE & FT POLK ATTN AKPPC-OCCT
1 RSCH CONTRACTS & GRANTS BR ARO
1 RESD ARO OFC CHF OF RED WASH DC
1 CHF OF RED DA ATTN SCI INFO BR RSCH SPT DIV WASH DC
1 CO HQS BN USAFAC & FT SILL ATTN S3
4 CO III CORPS ARTY ATTN S3 FORT SILL
1 CO USRAH ATTN S3 FT SILL
1 CG USAFAACFS ATTN AKPSIAG-AS FT SILL
1 CINC US ATLANTIC FLT CODE 312A USN BASE NORFOLK
1 CINC PACIFIC SCIEN ADV GP (J30S) BOX 13 FPO 96610
1 CDR TNG COMMAND US PACIFIC FLT SAN DIEGO
1 CHF BUR OF MED + SURG ON ATTN CODE 513
1 CHF RES DIV BUR OF MED + SURG DN
1 HEAD CLIN PSYCHOL SECT PROFESNL DIV BUR OF MED + SURG DN
5 TECH LIB PERS LIB BUR OF NAV PERS ARL ANNEX
3 DIR PERS RES DIV BUR OF NAV PERS
1 TECH LIB BUR OF SHIPS CODE 210L NAVY DEPT
1 BUR OF YDS + DKS DN ATTN ASST CHF FOR RES DEVEL TEST + EVAL
2 NAV AIR SYS COMD REP ATLANTIC NAV AIR STA NORFOLK
1 ENGNR PSYCHOL BR ONR CODE 455 ATTN ASST HEAD WASH DC
3 CO + DIR NAV TNG DEVICE CTR ORLANDO ATTN TECH LIB
1 CO FLT ANTI-AIR WARFARE TNG SAN DIEGO
1 CO NUCLEAR WPNS TNG CTR PACIFIC US NAV AIR STA SAN DIEGO
1 CO NAV AIR DEVEL CTR JOHNSVILLE PENNA ATTN NADC LIB
2 CO FLT TNG CTR NAV BASE NEWPORT
1 CDR FLT TNG CP NAV BASE CHARLESTON
2 CO US FLT TNG CTR NORFOLK
1 CO FLEET TNG CTR US NAV STA SAN DIEGO
1 CLIN PSYCHOL MENTAL HYGIENE UNIT US NAV ACAD ANNAPOLIS
1 PWRS NAV WAR COLL NEWPORT ATTN MAHAN LIB
3 CO SERV SCH COMD NAV TNG CTR SAN DIEGO
3 CO NAV GUIDED MSL SCH DAM NECK VA BEACH
2 CO & DIR US ATLANTIC FLT ASW TACTICAL NORFOLK
1 CO NUCLEAR WEAPONS TNG CTR ATLANTIC NAV AIR STA NORFOLK
2 CO FLT SONAR SCH KEY WEST
1 CO FLT ANTI-SUB WARFARE SCH SAN DIEGO
1 CHF OF NAVL RSCH PERS & TNG PR (CODE 458) ARL VA
1 CHF OF NAV RES ATTN DIR PSYCHOL SCI DIV CODE 450
1 CHF OF NAV RES ATTN HEAD GP PSYCHOL BR CODE 452
1 DIR US NAV RES LAB ATTN CODE 512C
1 DIR NAVAL RSCH LAB ATTN LIB CODE 2029 WASH DC
1 CHF OF NAV AIR TNG TNG RES DEPT NAV AIR STA PENSACOLA
1 CO NAV SCH OF AVN MED NAV AVN MED CTR PENSACOLA
1 LIB NAV MED RES LAB NAV SUB BASE GROTON
1 CO MED FLD RES LAB CAMP LEJEUNE
1 CDR NAV MSL CTR POINT MUGU CALIF ATTN TECH LIB CODE 3022
1 DIR AEROSPACE CREW EQUIP LAB NAV AIR ENGNR CTR PA
3 OIC NAV PERS RES ACTVY SAN DIEGO
1 NAV NEUROPSYCHIAT RES UNIT SAN DIEGO
1 DIR PERS RES LAB NAV PERS PROGRAM SUPPORT ACTIVITY WASH NAV YD
4 COMDT MARINE CORPS HQ MARINE CORPS ATTN CODE AO-1B
1 HQ MARINE CORPS ATTN AX
1 DIR MARINE CORPS EDUC CTR MARINE CORPS SCH QUANTICO
1 DIR MARINE CORPS INST ATTN EVAL UNIT
1 US MARINE CORPS HQS HIST REF LIB ATTN MRS JADOT
1 CHF OF NAV OPNS OP-01P1
1 CHF OF NAV OPNS OP-07TL
2 COMDT HQS 8TH NAV DIST ATTN EDUC ADV NEW ORLEANS
1 CHF OF NAV AIR TECH TNG NAV AIR STA MEMPHIS
1 DIR OPS EVAL GRP OFF OF CHF OF NAV OPS OP03EG
2 COMDT PTP COAST GUARD HQ
1 CHF OFCR PERS RES + REVIEW BR COAST GUARD HQ
1 CO US COAST GUARD TNG CTR GOVERNORS ISLAND NY
1 CO US COAST GUARD TNG CTR CAPE MAY NJ
1 CO US COAST GUARD TNG CTR & SUP CTR ALAMEDA CALIF
1 CO US COAST GUARD INST OKLA CITY OKLA
1 CO US COAST GUARD RES TNG CTR YORKTOWN VA
1 SUPT US COAST GUARD ACAD NEW LONDON CONN
1 OPNS ANLS OFC HQ STRATEGIC AIR COMD OFFUTT AFB
1 AIR TNG COMD/XPT RANDOLPH AFB
1 TECH DIR TECH TNG DIV(HRD) AFHRL LOWRY AFB COLO
1 CHF SCI DIV DRCTE SCI + TECH OCS R+D HQ AIR FORCE AFRSTA
1 FAA DRCTE OF PLNS & OPS HQ USAF WASH DC
1 CHF OF PERS RES BR DRCTE OF CIVILIAN PERS OCS-PERS HQ AIR FORCE
1 CHF ANAL DIV (AFPOPL (R) DIR OF PERSONNEL PLANNING HQS USAF
2 OPTY TIG USAF (AFIAS-G1) NORTON AFB
1 RADC RASH GRIFFISS AFB NY
2 SMAMA (SMACU-PERS RSCH) MCCLELLAN AFB
1 ATC ATXRQ RANDOLPH AFB
1 AFHRL/TT ATTN CAPT W S SELLMAN LOWRY AFB
1 HQ SAMSO (SMSIR) AF UNIT POST OFC LA AFS CALIF
2 MILIT TNG CTR OPR LACKLAND AFB
2 AFHRL (HRT) WRIGHT-PATTERSON AFB
1 AMD AMRH BROOKS AFB TEXAS
1 HQS ATC DCS/TECH TNG (ATTMS) RANDOLPH AFB
1 USAFA DIR OF THE LIB USAF ACAD COLO
1 DRCTE OF AEROSPACE SAFETY AFIAS-L DPTY IG NORTON AFB
1 6570TH PERS RES LAB PRA-4 AEROSPACE MED DIV LACKLAND AFB
2 CO HUMAN RESOURCES LAB BROOKS AFB
1 COMDT USAF SPEC OP SCH (TAC) EGLIN AFB
1 AFHRL (FT) WILLIAMS AFB ARIZ
1 PSYCHOBIOLOGY PROG NATL SCI FOUND
1 DIR NATL SECUR AGY FT GEO G MEADE ATTN TDL
1 DIR NATL SECUR AGY FT GEO G MEADE ATTN DIR OF TNG
3 CIA ATTN CRS/ADD STANDARD DIST
1 SYS EVAL DIV RES DIRECTORATE DOD-OCD PENTAGON
1 DEPT OF STATE BUR OF INTEL + RES EXTERNAL RES STAFF
1 SCI INFO EXCH WASHINGTON
2 CHF MGT & GEN TNG DIV TR 2C0 FAA WASH DC
1 BUR OF RES & ENGR US POST OFC DEPT ATTN CHF HUMAN FACTORS BR
1 EDUC MEDIA BR OE HEW ATTN T D CLEMENS
1 OFC OF INTERNATL TNG PLANNING & EVAL HR AID WASH DC
1 FAA MED LIB HQ 640 WASH DC
1 DEPT OF TRANS FAA ACS SEC HQ 610A WASH DC
2 ERIC DE WASH DC
2 SYS DEVEL CORP SANTA MONICA ATTN LIB
1 DUNLAP + ASSOC INC DARIEN ATTN LIB
2 MAC ATTN LIB MCLEAN VA
1 GP EFFECTIVENESS RSCH LAB U OF ILL DEPT OF PSYCHOL
1 ELECT PERS RSCH GP U OF SOUTHERN CALIF
2 LEARNING RSD CTR U OF PITTS ATTN DIR
1 HUMAN SCI RES INC MCLEAN VA
1 CTR FOR RSCH IN SOCIAL SYS ATTN LIBN MD
1 DIR CTR FOR RES ON LEARNING + TEACHING U OF MICH
1 P M STODDILL OHIO STATE UNIV
1 EDITOR TNG RES ABSTR AMER SOC OF TNG DIRS U OF TENN
1 U OF CHICAGO DEPT OF SOC
1 DIR CTR FOR RSCH IN SOCIAL SYS KENSINGTON MD
3 CANADIAN JOINT STAFF OFC OF DEF RES MEMBER WASHINGTON
3 CANADIAN ARMY STAFF WASHINGTON ATTN G3O2 TNG
2 CANADIAN LIAISON OFFCR ARMY ARMOR BD FT KNOX
2 OFC OF ARMED FORCES ATTACHE ROYAL SWEDISH EMBSY DC
3 AUSTRALIAN NAV ATTACHE EMBSY OF AUSTRALIA WASH DC
1 OFC OF AIR ATTACHE AUSTRALIAN EMBSY ATTN: T.A. NAVGN WASH, D.C.
2 AUSTRALIAN ARMY ATTACHE EMBSY OF AUSTRALIA ATTN TECH CLK
2 DR R T DOCD LRNING SYS LTD SURREY ENGLAND
1 MENNINGER FOUNDATION TOPEKA
1 AMER INSTS FOR RSCH SILVER SPRING
1 AMER INSTS FOR RSCH ATTN LIBN PA
1 DR E GINZBERG COLUMBIA UNIV SCH OF BUS
3 MATRIX RSCH CO FALLS CHURCH VA
1 EDUC & TNG CONSLT CO LA CALIF
1 OBERLIN COLL DEPT OF PSYCHOL
1 DR GEORGE T HAUTY CHMN DEPT OF PSYCHOL U OF DEL
1 VITRO LABS SILVER SPRING MD ATTN LIBN
1 HEAD DEPT OF PSYCHOL UNIV OF SC COLUMBIA
1 U OF GEORGIA DEPT OF PSYCHOL
1 U OF UTAH DEPT OF PSYCHOL
1 AMER INST FOR RSCH ATTN LIB PALO ALTO CALIF
1 COLL OF ARTS & SCI U OF MIAMI ATTN L L MCQUITTY
1 OHIO STATE U SCH OF AVN
1 DR J B CULLEN DEPT OF SOC & ANTHROP UNIV OF KY
2 OREGON STATE U DEPT OF MILIT SCI ATTN ADJ
1 AMER PSYCHOL ASSOC WASHINGTON ATTN PSYCHOL ABSTR
1 NU ILL U HEAD DEPT OF PSYCHOL
1 GEORGIA INST OF TECH DIR SCH OF PSYCHOL
1 LIFE SCI INC HURST TEXAS ATTN W G MATHENY
1 AMER BEHAV SCI CALIF
1 PUB ADMIN CTR ATTN J D KITCHEN SAN DIEGO
2 DIR INSTR RESOURCES STATE COLL ST CLOUD MINN
1 COLL OF WM + MARY SCH OF EDUC
1 SO ILLINOIS U DEPT OF PSYCHOL
2 ASSOC DIR CDC TNG PROG ATLANTA GA
1 WASH MILITARY SYS TECH LIB DIV BETHESDA MD
1 DR L TAYFORD NY STATE EDUC DEPT ABSTRACT EDITOR AVCR
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1 DR V ZACHERT MT 1 GOOD HOPE GA
1 DR S ROSCOE ASSOC DIR FOR RSCH INST OF AVN U OF ILL
1 DR C HELM DEPT EDUC PSYCH CITY U OF NY
1 GEN H P HARRIS (USA RET)PRES THE CITADEL SC
1 DR H SHOEMAKER DIR TNG RSCH GP NY
1 U OF MINN DEPT OF INDUST EDUC ATTN R E KUHL
1 VOC-TECH EDUC PROG PLNNG DEV ATTN W STOCK ST PAUL
1 CHF PROCESSING DIV DUKE U LIB
1 U OF CALIF GEN LIB DOCU DEPT
1 FLORIDA STATE U LIB GIFTS + EXCH
1 PSYCHOL LIB HARVARD UNIV CAMBRIDGE
1 U OF ILL LIB SER DEPT
2 U OF KANSAS LIB PERIODICAL DEPT
1 U OF NEBRASKA LIBS ACQ DEPT
1 OHIO STATE U LIBS GIFT + EXCH DIV
1 PENNA STATE U PATTEE LIB DOCU DESK
1 PURDUE U LIBS PERIODICALS CHECKING FILES
1 STANFORD U LIBS DOCU LIB
1 LIBN U OF TEXAS
1 SYRACUSE U LIB SER DIV
1 SERIALS REC UNIV OF MINN MINNEAPOLIS
1 STATE U OF IOWA LIBS SER ACQ
1 NU CAROLINA STATE COLL CH HILL LIB
2 BOSTON U LIBS ACQ DIV
1 U OF MICH LIBS SER DIV
1 BROWN U LIB
1 COLUMBIA U LIBS DOCU ACQ
1 DIR JOINT U LIBS NASHVILLE
1 U OF DENVER MARY REED LIB
2 LIB GEO WASH UNIV ATTN SPEC COLL DEPT WASH DC
2 LIB OF CONGRESS CHF OF EXCH + GIFT DIV
1 U OF PGH DOCU LIBN
1 CATHOLIC U LIB EDUC & PSYCHOL LIB WASH DC
1 U OF KY MARGARET I KING LIB
1 SO ILL U ATTN LIBN SER DEPT
1 KANSAS STATE U FARRELL LIB
1 BRIGHAM YOUNG U LIB SER SECT
1 U OF LOUISVILLE LIB BELKNAP CAMPUS
1 GEORGETOWN U LIB SER DEPT WASH DC
1 LIBS COLO STATE U ATTN DOC LIBN FT COLLINS
1 CG USA ARMOR TNG CTR ATTN DIR PERSN L & COMMTY ACTVTY FT KNOX
1 CG USAAD TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY FT BLISS
1 CG USA ENGR TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY MO
1 CG USA INF TNG CTR ATTN DIR PERSNL &COMMTY ACTVTY FT DIX
1 CG USA CBT SPT TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY ARIZ
1 CG USA BASIC CBT TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY KY
1 CG USA BASIC CBT TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY NC
1 CG USA ADMIN CTR & FT BENJAMIN HARRISON ATTN OFC CHF OF STAFF USA ALEX VA
1 CG USA MED TNG CTR FT HOUSTON
1 CG USA INF TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY LA
1 CG USA INF TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY ALA
1 CG USA INF TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY FT LEWIS
1 CG USA INF TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY SC
1 CG USA INF & MP TNG CTR ATTN DIR PERSNL & COMMTY ACTVTY GA
1 COMDT USA ARMOR SCH ATTN LIBRARY FT KNOX

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